

Paragraph	INDEX TO SPECIAL NOTICE TO MARINERS PARAGRAPHS Title	Page
1	The Prudent Mariner.....	I-1.3
2	Nautical Chart Symbols and Abbreviations Information.....	I-1.3
3	Use of the Metric System on NIMA Products.....	I-1.4
4	Geographic Names Usage for NIMA Products.....	I-1.4
5	International Association of Lighthouse Authorities (IALA) Maritime Buoyage System.....	I-1.4
6	International Ice Patrol Service.....	I-1.6
7*	Special Warnings.....	I-1.6
8	Trade with Cuba.....	I-1.11
9*	Automated Mutual-Assistance Vessel Rescue (Amver).....	I-1.12
10	International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual.....	I-1.13
11	Special Reporting Instructions for U.S. Flag Vessels, Vessels Carrying War Risk Insurance and Certain other Designated Vessels (Formerly USMER Vessels).....	I-1.13
12	Urgency and Safety Signals.....	I-1.13
13	Submarine Emergency Identification Signals and Hazard to Submarines.....	I-1.14
14	Rules, Regulations and Proclamations Issued by Foreign Governments.....	I-1.14
15	Warning-Danger from Submarine Cables and Pipelines.....	I-1.14
16	Caution-Close Approach to Moored Offshore Aids to Navigation.....	I-1.15
17	Pipeline Laybarges and Jetbarges.....	I-1.15
18	Required Reporting of Damaged U.S. Aids to Navigation.....	I-1.15
19	Oil Pollution-Compliance with the Clean Water Act.....	I-1.15
20	Compliance with the Act to Prevent Pollution from Ships.....	I-1.16
21	Packaged Marine Pollutants-Complying with MARPOL Annex III.....	I-1.17
22	Pollution-Ocean Dumping.....	I-1.17
23	Warning-Possible Danger from Unlabeled Intermodal Containers and Drums.....	I-1.17
24	Reporting of Dangers to Navigation.....	I-1.18
25*	Vessel Bridge-to-Bridge Radiotelephone Regulations.....	I-1.18
26	Seismic Surveys.....	I-1.19
27	United States-Caution Regarding Submarine Operations.....	I-1.19
28	Special Rules with Respect to Additional Station and Signal Lights for Navy Ships.....	I-1.20
29	United States Naval Vessels-Navigational Light Waivers-Distinctive Lights Authorized for Naval Vessels.....	I-1.20
30	Traffic Separation Schemes, Areas to be Avoided and Recommended Tracks.....	I-1.21

* Denotes significant change

Paragraph	INDEX TO SPECIAL NOTICE TO MARINERS PARAGRAPHS Title	Page
31	Firing Danger Areas.....	I-1.22
32*	LORAN Information.....	I-1.23
33	Endangered Species (Whales and Sea Turtles) Eastern Seaboard.....	I-1.23
34	Reporting Depth Information.....	I-1.25
35	Warning-Mined Areas.....	I-1.26
36	Mined Areas Reported.....	I-1.26
37	Minesweeping-Caution-Attention is Called to the Following Instructions.....	I-1.27
38	United States-Explosive Ordnance-Warning-General.....	I-1.28
39	Caution-Oil Well Structures in Waters Contiguous to the U.S. and its Territories.....	I-1.29
40	Caution Regarding Approach of Single Vessels Toward Naval Formations and Convoys.....	I-1.29
41*	National Imagery and Mapping Agency Distribution System.....	I-1.30
42*	International Hydrographic Organization (IHO).....	I-1.31
43*	International Distress Signals.....	I-1.33
44*	Worldwide Navigational Warning Service (WWNWS).....	I-1.34
45*	Weather Observation Reports.....	I-1.38
46	Radar Beacons (RACONS).....	I-1.39
47*	NAVTEX.....	I-1.40
48	Satellite Detection of Distress Signals.....	I-1.41
49	HF and VHF Radiotelephone and Radiotelex Marine Safety Broadcasts.....	I-1.44
50*	MARAD Advisories.....	I-1.45
51	Navigation Rules, International-Inland.....	I-1.50
52	Improper Use of Strobe Lights, Searchlights and Dangerous Cargo Light.....	I-1.51
53	Guidelines for WGS Datum Conversion.....	I-1.51
54	Anti-Shipping Activities Message.....	I-1.53
55	Caution on Announcement of New Charts and Publications.....	I-1.54
56*	Global Positioning System (GPS) and Differential GPS (DGPS) Information.....	I-1.54
57*	Television Antennae Interference with GPS.....	I-1.56
58*	Digital Selective Calling Distress Alert.....	I-1.56
59*	Vessel Squat in Shallow Water.....	I-1.57
60*	Promulgation of Maritime Safety Information by U.S. Information Providers.....	I-1.58
61*	Coast Guard Safety Information Available on Internet.....	I-1.62
62*	National Ocean Claims.....	I-1.62
63*	U.S. Economic Sanctions: Concerns for Mariners.....	I-1.71
64*	Maritime Industry Reporting of a Suspected or Actual Terrorist Incident.....	I-1.74

* Denotes significant change

(1) THE PRUDENT MARINER.**a. Warning On Use Of Floating Aids To Navigation and on Aids to Navigation in General and Fixing a Navigational Position.**

The aids to navigation depicted on charts comprise a system consisting of fixed and floating aids with varying degrees of reliability. Therefore, prudent mariners will not rely solely on any single aid to navigation, particularly a floating aid. An aid to navigation also refers to any device or structure external to a craft, designed to assist in determination of position. This includes celestial, terrestrial, and electronic means, such as Global Positioning System (GPS) and Differential GPS (DGPS). Here, too, the prudent mariner will not rely solely on any single aid to navigation.

The buoy symbol is used to indicate the approximate position of the buoy body and the sinker which secures the buoy to the seabed. The approximate position is used because of practical limitations in positioning and maintaining buoys and their sinkers in precise geographical locations. These limitations include, but are not limited to, inherent imprecisions in position fixing methods, prevailing atmospheric and sea conditions, the slope of and the material making up the seabed, the fact that buoys are moored to sinkers by varying lengths of chain, and the fact that buoy and/or sinker positions are not under continuous surveillance but are normally checked only during periodic maintenance visits which often occur more than a year apart. The position of the buoy body can be expected to shift inside and outside the charting symbol due to the forces of nature. The mariner is also cautioned that buoys are liable to be carried away, shifted, capsized, sunk, etc. Lighted buoys may be extinguished or sound signals may not function as the result of ice or other natural causes, collisions, or other accidents. Many of these factors also apply to articulated lights.

For the foregoing reasons, a prudent mariner must not rely completely upon the position or operation of floating aids to navigation, but will also utilize bearings from fixed objects and aids to navigation on shore. Further, a vessel attempting to pass close aboard always risks collision with a yawing buoy or with the obstruction the buoy marks.

b. Use of Foreign Charts.

In the interest of safe navigation, caution should be exercised in the use of foreign charts not maintained through U.S. Notice to Mariners.

Foreign produced charts are occasionally mentioned in NIMA Sailing Directions when such charts may be of a better scale than U.S. produced charts. Mariners are advised that if or when such foreign charts are used for navigation it is their responsibility to maintain those charts from the Notice to Mariners of the foreign country producing the charts.

The mariner is warned that the buoyage systems, shapes, colors, and light rhythms used by other countries often have a different significance than the U.S. system.

Mariners are further warned about plotting positions, especially satellite-derived positions such as from GPS, onto foreign charts where the datum is unknown or the conversion from WGS-84 is unknown.

c. Chart Notes Regarding Different Datums.

Particular caution should be exercised during a passage when transferring the navigational plot to an adjacent chart upon a different geodetic datum or when transferring positions from one chart to another chart of the same area which is based upon a different datum. The transfer of positions should be done by bearings and distances from common features.

Notes on charts should be read with care, as they give important information not graphically presented. Notes in connection with the chart title include the horizontal geodetic datum which serves as a reference for the values of the latitude and longitude of any point or object on the chart. The latitudes and longitudes of the same points or objects on a second chart of the same area which is based upon a different datum will differ from those of the first chart. The difference may be navigationally significant. Additionally, datum changes between chart editions could significantly affect the positions of navigational aids found in the List of Lights and other NIMA publications.

Positions obtained from satellite navigation systems, such as from GPS, are normally referred to the World Geodetic System 1984 (WGS-84) Datum. The differences between GPS satellite-derived positions and positions on some foreign charts cannot be determined: mariners are warned that these differences MAY BE SIGNIFICANT TO NAVIGATION and are therefore advised to use alternative sources of positional information, particularly when closing the shore or navigating in the vicinity of dangers.

(Repetition NTM 1(1)02)

(NIMA/PTNM)

(2) NAUTICAL CHART SYMBOLS AND ABBREVIATIONS INFORMATION.

Symbols and abbreviations approved for use on all regular nautical charts published by the National Imagery and Mapping Agency and the National Ocean Service are contained in the November 1997 edition of Chart No. 1, United States of America

(2) NAUTICAL CHART SYMBOLS AND ABBREVIATIONS INFORMATION. (Continued).

Nautical Chart Symbols, Abbreviations and Terms. This publication is available from the National Imagery and Mapping Agency and the National Ocean Service NOAA, and its sales agents and can be found on the NIMA website. The introduction to this publication includes a number of paragraphs on metric and fathom charts, soundings, drying heights, shorelines, landmarks, buoys, IALA buoyage, heights, conversion scales, traffic separation schemes, and correction dates.

Buoys and Beacons of the IALA Buoyage System Regions A and B are illustrated in the back of Chart No. 1, including light characteristics in full color.

The various sections comprising the Table of Contents follow the sequence presented in The International Hydrographic Organization (IHO) Chart 1 (INT1); therefore, the numbering system in this publication follows the standard format approved and adopted by the IHO. Where appropriate, each page lists separately the current preferred U.S. symbols shown on charts of the National Ocean Service (NOS) and NIMA. Also shown in separate columns are the IHO symbols and symbols used on foreign charts reproduced by NIMA.

(Repetition NTM 1(2)02)

(NIMA/PTNM)

(3) USE OF THE METRIC SYSTEM ON NIMA PRODUCTS.

The National Imagery and Mapping Agency (NIMA) is continuing the program to convert the depths and heights on nautical charts and in publications to the metric system. Although many facsimile reproductions of foreign charts have shown depths and heights in meters for several years, the NIMA originated charts began to show depths and heights in meters instead of fathoms and/or feet in January 1970. Depths are shown in meters (usually in meters and decimeters to 21 meters) and boldly stated in the chart title and in purple colored type in the outer chart borders. A conversion table from meters and decimeters to fathoms and feet is also carried on each chart.

List of Lights, Radio Aids and Fog Signals and Sailing Directions, as they are reformatted, will adopt the Metric Measurement System as feasible.

(Supersedes NTM 1(3)02)

(NIMA/PTNM)

(4) GEOGRAPHIC NAMES USAGE FOR NIMA PRODUCTS.

Wherever possible, names used on NIMA charts and in NIMA publications are in the form approved by the United States Board on Geographic Names. Generally, local official spellings are used for those features entirely within a single sovereignty, while names of countries and those features which are common to two or more countries or which lie beyond single sovereignty carry Board-approved conventional spellings (i.e. names in common English language usage). When alternate names would be of value to the user, they may be shown for information purposes within parentheses. Important individual name changes are made to all revised charts as the opportunity permits. Geographic names or their spellings do not necessarily reflect recognition of the political status of an area by the United States Government.

(Supersedes NTM 1(4)02)

(NIMA)

(5) INTERNATIONAL ASSOCIATION OF MARINE AIDS TO NAVIGATION AND LIGHTHOUSE AUTHORITIES (IALA) MARITIME BUOYAGE SYSTEM.

The IALA Maritime (combined Cardinal/Lateral) Buoyage System has been implemented by nearly every maritime jurisdiction worldwide as either REGION A (red to port) or REGION B (red to starboard). The actual conversion began in 1977 and for most areas, is completed.

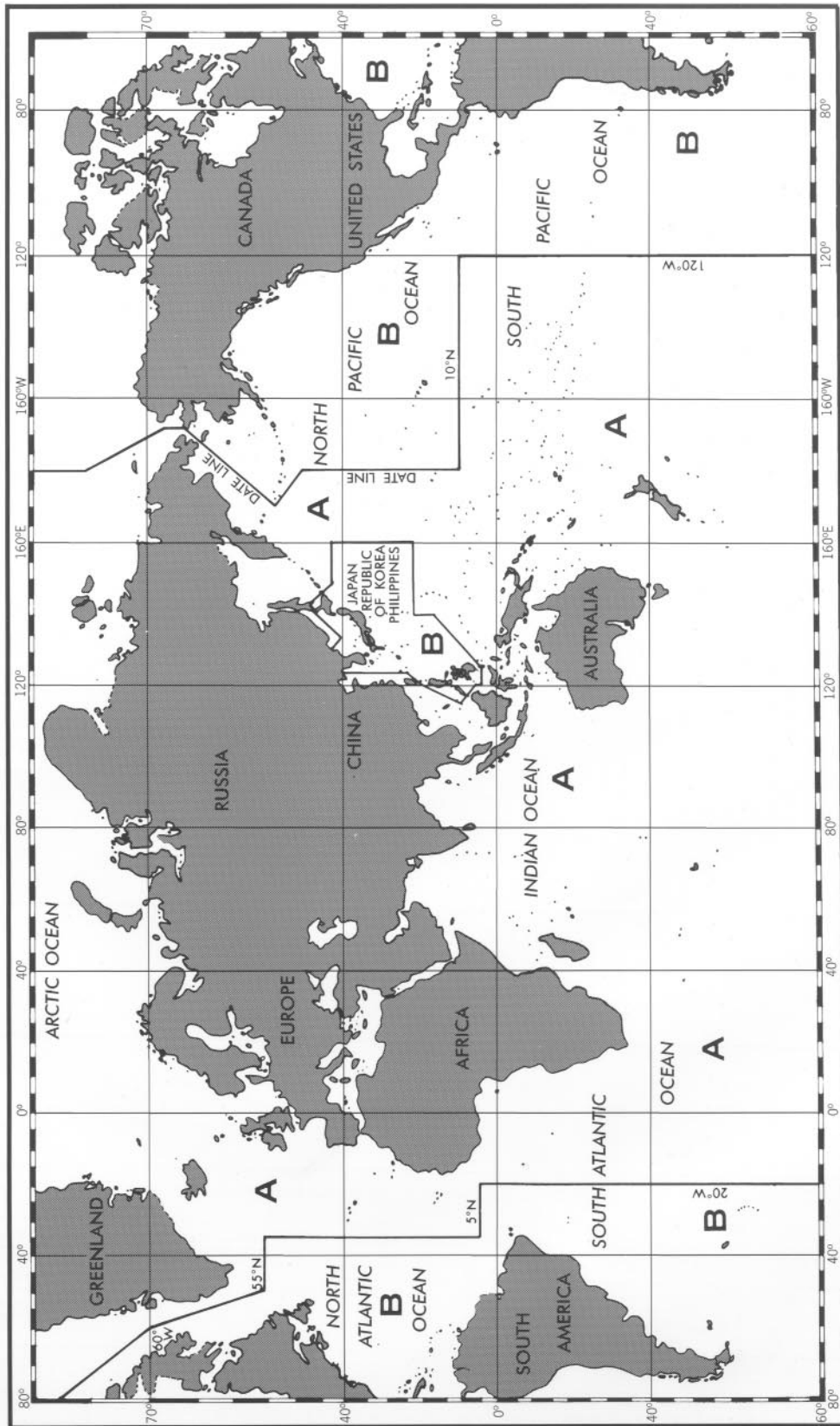
The terms "REGION A" and "REGION B" are used to determine which type of buoyage region is in effect. The major difference between the two buoyage regions is the lateral marks. When viewed from sea, the lateral marks in REGION A will be red to port; in REGION B they will be red to starboard. Shapes of lateral marks will be the same in both REGIONS, can to port; cone (nun) to starboard. Cardinal and other marks continue to follow current guidelines and may be found in both REGIONS. A modified lateral mark, indicating the preferred channel where a channel divides, is in place for use in both REGIONS. Each chart reflects a REGION A or REGION B note to indicate which type of lateral buoyage is in use. A graphic illustration showing the approximate REGION A and B limits can be found on the following page.

(Repetition NTM 1(5)02)

(NIMA/PTNM)

IALA MARITIME BUOYAGE SYSTEM

BUOYAGE REGIONS A AND B



(6) INTERNATIONAL ICE PATROL SERVICE.

Between the months of February and August, the International Ice Patrol (IIP) conducts its annual mission of defining the limits of iceberg distribution in the northwest Atlantic and providing iceberg warnings to mariners. IIP determines iceberg distribution using iceberg sighting reports filed by ships and planes crossing the area. It also regularly conducts ice reconnaissance patrols to monitor the region of the Grand Banks of Newfoundland and define the southern, southeastern and southwestern limits of iceberg distribution in this dangerous region. Ice Patrol Bulletins for 0000Z and 1200Z daily Ice Limits are broadcast via Voice, SITOR (RATT), NAVTEX and Inmarsat-C SafetyNET. There is also a daily 1200Z Ice Limit Radiofacsimile Chart that is both broadcast and available through the Internet. Details are contained in Chapter 3 of Radio Navigational Aids, Pub. 117.

All shipping is requested to assist in the operation of the International Ice Patrol by reporting all ice sightings. Format and content of ice sighting messages are included in Pub. 117.

(Repetition NTM 1(6)02)

(USCG)

(7) SPECIAL WARNINGS (In force 18 December 2002).**SPECIAL WARNING NO. 1.**

Navigational warnings broadcast by NIMA are normally divided into categories, HYDROLANTS and HYDROPACS, referring respectively to the Atlantic and Pacific Oceans. It has been determined there now exists a need for disseminating information of general interest not covered by the above categories. Therefore, with this message the Special Warnings series is reintroduced. The messages will be transmitted from all U.S. Navy and Coast Guard Stations broadcasting HYDROS.

(May 27, 1948)

SPECIAL WARNING NO. 29.**CUBA.**

1. Mariners are advised to use extreme caution in transiting the waters surrounding Cuba. Within distances extending in some cases upwards of 20 miles from the Cuban coast, vessels have been stopped and boarded by Cuban authorities. Cuba vigorously enforces a 12-mile territorial sea extending from straight baselines drawn from Cuban coastal points. The effect is that Cuba's claimed territorial sea extends in many cases beyond 12 miles from Cuba's physical coastline.
2. The publication of this notice is solely for the purpose of advising United States mariners of information relevant to navigational safety and in no way constitutes a legal recognition by the United States of the validity of any foreign rule, regulation, or proclamation so published.

(March 1, 1962, updated January 1, 1982, reviewed November 9, 1994)

SPECIAL WARNING NO. 77.**PAPUA NEW GUINEA—BOUGAINVILLE COAST.**

1. Bougainville Island declared unilateral independence from Papua New Guinea May 17, 1990. The government of Papua New Guinea does not recognize the declaration. Consequently, the political situation may be tense in the future.
2. The following Notice to Mariners No. 36/90 issued by the government of Papua New Guinea is quoted in its entirety:

Quote

Overseas vessels are advised to stand clear of the islands of Bougainville and Buka and to remain outside of territorial waters extending 12 nautical miles from the coast of Bougainville and immediately adjacent islands but excluding Solomon Islands Territory, and excluding the groups of islands or atolls known as Feni, Green, Nuguria, Carteret, Mortlock and Tasman. Any vessel entering the waters adjacent to Bougainville or Buka will be subject to stop and search powers. This Notice to Mariners is effective immediately (22nd May 1990 EST) in respect to overseas shipping. Papua New Guinea coastal vessels will be restricted as of midnight local time on 20th May 1990. Restrictions will continue for an indefinite period. Charts affected are BA 214, BA 2766, BA 3419, BA 3420, BA 3830, BA 3994, INT 604 and AUS 4604. Dept. of Transport. Port Moresby. Papua New Guinea.

Unquote

3. U.S. mariners are advised to exercise extreme caution in entering and transiting the waters of Bougainville.
- (Dept. of State) (25 May 1990)

(7) SPECIAL WARNINGS. (Continued).**SPECIAL WARNING NO. 81.****LIBYA.**

1. Due to unsettled relations between the United States Government and the government of Libya, U.S. mariners are advised to exercise caution in transiting the waters of the Gulf of Sidra south of 32-30N. The United States does not maintain an embassy in Libya and cannot ensure the safety of its citizens.
2. The publication of this notice is solely for the purpose of advising United States mariners of information relevant to navigational safety and in no way constitutes a legal recognition by the United States of the validity of any foreign rule, regulation or proclamation so published.
3. Cancel Special Warning No. 52.
(Dept. of State) (31 Aug 1990)

SPECIAL WARNING NO. 82.**MOROCCO.**

1. U.S. mariners are advised to exercise caution within the territorial waters claimed by Morocco. Moroccan coastal protection warships, while engaged in anti-drug smuggling activities or enforcing territorial fishing rights, have been known to open fire on innocent vessels.
2. The publication of this notice is solely for the purpose of advising United States mariners of information relevant to navigational safety and in no way constitutes a legal recognition by the United States of the validity of any foreign rule, regulation or proclamation so published.
(Dept. of State) (31 Aug 1990)

SPECIAL WARNING NO. 89.**WEST COAST OF AFRICA—WESTERN SAHARA.**

1. Prior to the September 1991 cease-fire between Morocco and the Polisario, unprovoked attacks on shipping off the coast of the Western Sahara by Polisario guerrillas using machine guns, grenades, and mortars occurred, resulting in the loss of life and property.
2. Despite the cease-fire, the potential for violent incidents still exists. Mariners are advised to continue using extreme caution and remain well offshore when transiting the waters off the west coast of Africa between 27-40N 013-11W and Cap-Blanc (20-47N 017-03W) and particularly between Dakhla (23-42N 015-56W) and Cape Corbiero (21-48N 016-59W).
3. The publication of this notice is solely for the purpose of advising United States mariners of information relevant to navigation safety and in no way constitutes a legal recognition by the United States of the validity of any foreign rule, regulation, or proclamation so published.
4. Cancel Special Warning No. 69.
(Dept. of State) (16 Oct 1992)

SPECIAL WARNING NO. 92.**LIBERIA.**

1. Mariners are advised to use caution when sailing near the coast of Liberia.
2. The United Nations Security Council has passed Resolution 788 (November 19, 1992), which says that "All states shall, for the purposes of establishing peace and stability in Liberia, immediately implement a general and complete embargo on all deliveries of weapons and military equipment to Liberia until the Security Council decides otherwise." Resolution 788 also "requests all states to respect the measures established by the Economic Community of West African States (ECOWAS) to bring about a peaceful solution to the conflict in Liberia."
3. Cancel Special Warning No. 90.
(Dept. of State) (03 Dec 1992, revised 29 Oct 1997)

SPECIAL WARNING NO. 95.**NICARAGUA.**

1. Mariners operating small vessels such as yachts and fishing boats should note that Nicaragua has boundary disputes with its neighbors in both its Caribbean and Pacific waters, especially with Honduras, and should exercise caution. There have been cases of foreign-flagged fishing vessels and other vessels being seized off the Nicaraguan coast by Nicaraguan authorities. The government of Nicaragua has adopted a new law that mandates the payment of a fine equal to 200 percent of the value of any boat caught fishing illegally within Nicaragua's Exclusive Economic Zone (EEZ).

(7) SPECIAL WARNINGS. (Continued).

2. While in all cases passengers and crew have been released within a period of several weeks, in some cases the ships have been searched, personal gear and navigational equipment have been stolen, and there have been excessive delays in releasing vessels. Prompt U.S. Embassy consular access to detained U.S. citizens on Nicaragua's Caribbean coast may not be possible because of delays in notification due to the relative isolation of the region.
3. It should also be noted that there have been incidents of piracy in Caribbean and Pacific waters off the coast of Nicaragua, but the Nicaraguan navy has increased its patrols and no recent incidents have been reported.
4. Cancel Special Warning No. 91.
(Dept. of State) (10 Feb 1994, revised 29 Oct 1997)

SPECIAL WARNING NO. 107.**SRI LANKA.**

1. Sri Lanka has announced that entrance by unauthorized vessels into the waters of Palk Strait and the eastern territorial waters of Sri Lanka is prohibited because of increased acts of terrorism against shipping and Sri Lankan Naval Vessels. Sri Lanka requires that vessels in the vicinity contact the Sri Lankan Command (Tel. 941-42-30-19, Fax: 941-433-986) for authorization if they wish to enter these areas.
2. The government also has established a restrictive zone in coastal waters along the west coast from Kalpitiya to Colombo Port's southern backwaters. Written permission from the Sri Lankan Command is required for entry into these waters as well. Sri Lankan authorities have advised that they will fire on violators.
3. The U.S. Embassy in Colombo reports that between July and September 1997, at least three foreign flag merchant vessels were attacked by the Liberation Tigers of Tamil Eelam (LTTE). One vessel operating as a passenger ferry off Mannar on the northwest coast was set on fire and sunk. A second vessel departing north from the Jaffna Peninsula was hijacked, stripped of equipment, and its crew temporarily held by the terrorists. One crew member was killed during the hijacking. A third vessel was loading a mineral cargo off the northeast coast near Pulmoddai when it was attacked and at least five members of its crew killed.
4. Any anti-shipping activity should be reported to NIMA NAVSAFETY, U.S. State Department, or the nearest U.S. Consulate. Refer to NIMA Pub. 117, Chapter 4, for instructions on filing a Ship Hostile Action Report (SHAR) or Anti-Shipping Activity Message (ASAM).
5. The publication of this notice is solely for the purpose of advising United States mariners of information relevant to navigational safety and in no way constitutes a legal recognition by the United States of the validity of any foreign rule, regulation or proclamation so published.
6. Cancel Special Warning No. 94.
(Dept. of State) (01 Dec 1997)

SPECIAL WARNING NO. 108.**SUDAN.**

1. In January 1996 the Department of State warned all U.S. citizens against travel to Sudan due to ongoing violence within the country. Citing the U.S. Government's suspension of its diplomatic presence in Sudan, the Department advised that its ability to provide emergency consular services would be severely limited. In August 1998 the State Department again warned U.S. citizens against travel to Sudan "following the recent U.S. air strikes against terrorist facilities and possible threats to Americans and American interests in that country." The latter warning (No. 98-041) remains in effect to date.
2. In November 1997 President Clinton issued Executive Order 13067 imposing a U.S. trade embargo against Sudan. Among the prohibited activities are "any transaction by a United States person relating to transportation of cargo to or from Sudan." "United States person" is defined as any U.S. citizen, permanent resident, entity organized under U.S. law, or person in the United States. The embargo is still in effect.
3. Notwithstanding the pre-existing travel warning and ongoing U.S. trade embargo, the recent U.S. missile attack on a chemical plant in Khartoum has raised concerns of possible retaliation against U.S. citizens and/or commercial interests. U.S. mariners are therefore urged to avoid Port Sudan or other Sudanese ports. U.S. vessels are also advised to remain well clear of Sudanese territorial waters in the western Red Sea area.
(Dept. of State) (20 October 1998)

SPECIAL WARNING NO. 111**SOMALIA.**

1. Due to continuing conditions of armed conflict in Somalia and its territorial waters, mariners are advised to avoid the Port of Mogadishu and remain at least 50 nautical miles distant from the southeast Somali coast. Ships not specifically expected at the ports of Berbera and Bosaso should also avoid approaching the northern Somali coast.

(7) SPECIAL WARNINGS. (Continued).

2. In the past year there have been increasing reports of armed attacks on passing commercial vessels off the coast of Somalia. Fishing vessels, freighters and tankers have been fired upon by small speedboats with conventional weapons and rocket launchers. Ships have been hijacked, cargoes stolen, and crews held for ransom. Formerly confined to the port city of Mogadishu, the attacks have since extended into coastal waters--recent hijackings have occurred as far as 40 miles off shore.
3. The Department of State has warned U.S. citizens against all travel to Somalia. Inter-clan and interfactional fighting can flare up with little warning, and kidnapping and other threats to foreigners can occur unpredictably in many regions. There is no national government in Somalia to offer general security or police protection for travelers. While parts of the north are relatively peaceful, including much of the self-declared "Republic of Somaliland," there is no U.S. diplomatic presence in Somalia to provide up-to-date security assessments or consular assistance to U.S. citizens.
4. Cancel Special Warning No. 88.
(Dept. of State) (12 May 1999)

SPECIAL WARNING NO. 113.**YEMEN.**

1. The level of risk for foreigners in Yemen remains high. On 12 October 2000, several U.S. citizens were killed and many more were injured in an incident involving a U.S. Navy ship in the port of Aden, Yemen in what may have been a terrorist attack. An explosion in the morning of 13 October 2000 caused minor damage to the British Embassy in Sanaa, Yemen and no casualties. While U.S. and Yemeni officials are still cooperating closely to determine the cause of the tragic explosion, the investigation has only started. Under these circumstances, U.S. mariners should avoid Yemeni ports for the present.
2. In light of this and other recent events, the U.S. Department of State warns U.S. citizens to defer travel to Yemen. U.S. citizens should exercise a very high level of caution and should only travel between cities by air or with an armed escort. They should register with the U.S. Embassy in Sanaa and remain in contact with the Embassy for updated security information at (967) (1) 238-844 through 238-852.
(Dept. of State) (13 October 2000)

SPECIAL WARNING NO. 114.**IRAN.**

1. Mariners are advised to exercise extreme caution when transiting the waters of the North Persian Gulf.
2. Iranian-flag speedboats and patrol craft operating in Iranian and international waters have boarded vessels and demanded payment before the vessels are allowed to proceed.
3. Mariners should exercise extreme caution and vigilance when operating in this area, and should obtain and evaluate current warning information broadcasted by the National Imagery and Mapping Agency (NIMA) via HYDROPAC broadcasts.
4. Any anti-shipping activity should be reported to NIMA NAVSAFETY Bethesda MD or navsafety@nima.mil via Ship Hostile Action Report (SHAR) procedures (see NIMA Pub. 117-Chapter 4), or directly to the U.S. State Department, or nearest U.S. Embassy or Consulate.
5. The publication of this notice is solely for the purpose of advising U.S. mariners of information relevant to navigation safety, and in no way constitutes a legal recognition by the United States of the validity of any foreign rule, regulation, or proclamation so published.
6. Cancel Special Warning No. 104.
(Dept. of State) (05 February 2001)

SPECIAL WARNING NO. 115.**PERSIAN GULF.**

1. In the Persian Gulf, multi-national naval units continue to conduct a maritime operation to intercept the import and export of commodities and products to/from Iraq that are prohibited by UN Security Council Resolutions 661 and 687.
2. Vessels transiting the Persian Gulf and Gulf of Oman can expect to be queried and, if bound for or departing from Iraq or the Shatt-al-Arab waterway, also intercepted and boarded. Safe navigation may require vessels to be diverted to a port or anchorage prior to conducting an inspection.
3. Maritime interception operations in the Red Sea, Strait of Tiran and Strait of Hormuz have ceased. Cargo bound for Aqaba or transshipment from Aqaba may be inspected on shore according to an agreement worked out by the UN Sanctions Committee and Jordanian authorities.
4. Documentation requirements for the naval regime in the Persian Gulf and the shore-based regime in Aqaba are identical and can be found in the most recent HYDRPOACS covering the enforcement of UN sanctions against Iraq.

(7) SPECIAL WARNINGS. (Continued).

5. Stowage and other requirements for vessels transiting the Persian Gulf can also be found in the most recent HYDROPACS covering the UN sanctions against Iraq.
6. Ships which, after being intercepted, are determined to be in violation of UN Security Council Resolution 661 will not be allowed to proceed with their planned transit.
7. The intercepting ship may use all available communications, primarily VHF Channel 16, but including International Code of Signals, flag hoists, other radio equipment, signal lamps, loudspeakers, bow shots, and other appropriate means to communicate directions to a ship.
8. Failure of a ship to proceed as directed will result in the use of the minimum level of force necessary to ensure compliance.
9. Any ships, including waterborne craft and armed merchant ships, or aircraft, which threaten or interfere with multinational forces engaged in enforcing a maritime interception may be considered hostile.
10. Cancel Special Warning No. 100.
(Dept. of State) (16 Feb 2001)

SPECIAL WARNING NO. 116.**PAKISTAN.**

1. Mariners calling on Pakistan are advised that levels of sectarian and factional violence remain high. Karachi, the main port, continues to be affected by politically-motivated killings.
2. On March 8, 1995, unknown assailants opened fire on an official U.S. Consulate shuttle in Karachi, killing two embassy employees and wounding a third.
3. Anti-American sentiment can be provoked easily and spontaneously in response to international events that radicals misconstrue as directed against Islam. For example, the UN resolution on sanctions against Afghanistan resulted in sporadic anti-American protests.
4. Port facilities and vessels may offer targets of opportunity for terrorist attacks. U.S. mariners are advised to exercise heightened security awareness and prudent security precautions when in Pakistani ports and waters.
5. Cancel Special Warning No. 102.
(Dept. of State) (05 March 2001)

SPECIAL WARNING NO. 117.**ALGERIA.**

1. Due to the potential for domestic unrest and anti-foreign violence, U.S. mariners are advised to exercise extreme caution when in Algerian waters. Although there has only been one attack against foreigners since 1997, the level of risk in Algeria remains high.
2. Attacks against maritime vessels in Algerian ports have taken place several years ago. The U.S. Embassy in Algiers specifically identifies ports, train stations (trains), and airline terminals as terrorist targets. Commercial shipping should remain on maximum alert when in Algerian waters and maintain adequate security precautions.
3. The Department of State recommends that U.S. citizens evaluate carefully the implications for their security and safety before deciding to travel to Algeria, and that Americans in Algeria whose circumstances do not afford them effective (armed) protection depart the country. Americans arriving in the country should not disembark and travel within the country without adequate, including armed, protection immediately upon arrival.
4. Cancel Special Warning No. 103.
(Dept. of State) (05 March 2001)

SPECIAL WARNING NO. 118.**LEBANON.**

1. The U.S. Department of State warns U.S. citizens, including U.S. mariners, of the risks of travel to Lebanon and recommends that Americans exercise caution while traveling there. During Lebanon's civil conflict from 1975 to 1990, Americans were targets of numerous terrorist attacks in Lebanon. While there have been very few such incidents in recent years, the perpetrators of these attacks are still present in Lebanon and retain the ability to act.
2. The local security environment can limit the movement of U.S. officials in certain areas of the country. This factor, plus limited staffing, may prevent the U.S. Embassy from performing full consular functions and providing timely assistance to U.S. citizens in Lebanon. Dual nationals and spouses of Lebanese citizens can encounter particular difficulties, and should see the Department of State Consular Information Sheet on Lebanon. U.S. citizens who travel to Lebanon despite this warning should exercise extreme caution. U.S. citizens traveling to Lebanon are encouraged to register at the U.S. Embassy in Beirut.

(7) SPECIAL WARNINGS. (Continued).

3. The security situation may change rapidly, and visitors to Lebanon should monitor the news for reports of incidents that might affect their personal safety.
4. Cancel Special Warning No. 71.
(Dept. of State) (09 March 2001)

**SPECIAL WARNING NO. 119.
SIERRA LEONE.**

1. Mariners are strongly advised not to use any ports in Sierra Leone except for the port of Freetown, which is currently considered to provide safe harborage. Mariners should note that the Department of State warns U.S. citizens against travel to Sierra Leone. Although the security situation in Freetown has improved somewhat, areas outside the capital are still very dangerous.
2. The Department of State has terminated the ordered departure status of U.S. Government personnel in non-emergency positions. However, the U.S. Embassy in Freetown currently operates with a reduced staff. Only emergency consular services to U.S. citizens are available, and the Embassy's ability to provide these services is limited. U.S. citizens in Sierra Leone should review their own personal security situations in determining whether to remain in the country.
3. Cancel Special Warning No. 109.
(Dept. of State) (16 March 2001)

**SPECIAL WARNING NO. 120.
WORLDWIDE.**

1. Due to recent events in the Middle East and the American homeland, U.S. forces worldwide are operating at a heightened state of readiness and taking additional defensive precautions against terrorist and other potential threats. Consequently, all aircraft, surface vessels, and subsurface vessels approaching U.S. forces are requested to maintain radio contact with U.S. forces on Bridge-to-Bridge Channel 16, international air distress (121.5 MHz VHF) or MILAIR distress (243.0 MHz UHF).
2. U.S. forces will exercise appropriate measures in self-defense if warranted by the circumstances. Aircraft, surface vessels, and subsurface vessels approaching U.S. forces will, by making prior contact as described above, help make their intentions clear and avoid unnecessary initiation of such defensive measures.
3. U.S. forces, especially when operating in confined waters, shall remain mindful of navigational considerations of aircraft, surface vessels, and subsurface vessels in their immediate vicinity.
4. Nothing in the special warning is intended to impede or otherwise interfere with the freedom of navigation or overflight of any vessel or aircraft, or to limit or expand the inherent self-defense rights of U.S. forces. This special warning is published solely to advise of the heightened state of readiness of U.S. forces and to request that radio contact be maintained as described above.
(Dept. of State) (16 November 2001)

SPECIAL WARNINGS FOOTNOTE.

In January 1977, DMA now NIMA commenced issuing warnings as NAVAREAS IV and XII broadcasts in addition to the HYDROLANT and HYDROPAC series.
(Supersedes NTM 1(7)02) (NIMA/DEPT. OF STATE)

(8) TRADE WITH CUBA.

The President of the United States proclaimed an embargo February 7, 1962 on all trade with Cuba. Except as authorized by Department of Treasury regulations or license, all dealings in property in which Cuba or a Cuban national has an interest (including all financial transactions in Cuba) by any person subject to U.S. jurisdiction are prohibited. Unless otherwise authorized by the Department of Treasury, it is unlawful for any person subject to the jurisdiction of the United States to transport, import, or otherwise deal in or engage in any transaction with respect to any merchandise outside the United States if such merchandise: (1) is of Cuban origin; (2) is or has been located in or transported from or through Cuba; or (3) is made or derived in whole or part from any Cuban growth, produce, or manufacture. It is also unlawful for any person subject to U.S. jurisdiction to engage in any transportation of goods or merchandise from anywhere to Cuba unless the following conditions are met: (1) such transportation is licensed or otherwise authorized by Treasury; and (2) if U.S. goods or merchandise are involved, the exportation is itself licensed or otherwise authorized by the Department of Commerce under the provisions of the

(8) TRADE WITH CUBA. (Continued).

Export Administration Act of 1979, as amended. Licenses or authorizations to engage in such trade will not normally be granted. Certain exceptions exist for trade in informational materials. Unless licensed by Treasury, no vessel may enter a U.S. port for any purpose including bunkering or the acquisition of ship's stores if there are on board goods or passengers coming from, or going to, Cuba, or goods in which Cuba or a Cuban national has an interest. Unless licensed by Treasury, no vessel which enters a port or place in Cuba to engage in the trade of goods or services may, within 180 days of such vessel's departure from such port or place in Cuba, load or unload freight at any place in the United States. Persons who violate these restrictions may be subject to criminal or civil sanctions, or both, and vessels involved in such trade contrary to law may be subject to seizure and forfeiture (reviewed November 12, 1998).

(Repetition NTM 1(8)02)

(DEPT. OF STATE)

(9) AUTOMATED MUTUAL-ASSISTANCE VESSEL RESCUE (AMVER).

The Internet website for Amver is: www.amver.com. The Amver system, maintained and administered by the United States Coast Guard, with the cooperation of coast radio stations of many nations, is a global ship reporting system for search and rescue (SAR) which provides important aid to the development and coordination of SAR efforts in the offshore areas of the world. Vessels of all nations, on the high seas, are encouraged to voluntarily send movement (sailing) reports and periodic position reports to the Amver Center located in Martinsburg, West Virginia, via selected radio stations and coast earth stations.

Information from these reports is entered into a computer database which is used to generate and maintain dead reckoning positions. Characteristics of vessels which are valuable for determining SAR capability are also entered into the computer from available sources of information. Information concerning the predicted location and SAR characteristics of each vessel estimated to be within the area of interest is made available, upon request, only to recognized SAR agencies of any nation, or vessels needing assistance. Predicted locations are only disclosed for reasons related to maritime safety.

Messages sent within the Amver system are at no cost to the ship or owner. Benefits to shipping include: (1) improved chances of aid in emergencies, (2) reduced number of calls for assistance by vessels not favorably located to assist, and (3) reduced time lost by vessels responding to calls for assistance. An Amver participant is under no greater obligation to render assistance during an emergency than a vessel that is not participating.

Instructions on participation in the Amver system are usually available in the following languages: Chinese, Danish, Dutch, English, French, German, Greek, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Russian, Spanish, and Swedish. They are available from:

Amver Maritime Relations
USCG Battery Park Building
New York, New York 10004-1499
U.S.A.
Telephone: (212) 668-7762
E-mail: rkenney@batteryng.uscg.mil

In addition to its Internet web page of www.amver.com other sources for Amver information include U.S. Coast Guard Area and District offices, Marine Inspection Offices, and Captain of the Port Offices in major U.S. ports. Requests for instructions should state the language desired if other than English.

Amver reports can be sent at no cost to the ship if sent via Inmarsat-C using the Amver/SEAS software and designated Telenor land earth stations. Necessary equipment includes an IBM PC or compatible with a 3.5 inch floppy disk drive and an Inmarsat-C mobile terminal with a 3.5 inch floppy disk drive and external port. Amver/SEAS software is available through Telenor Satellite Services, Inc., or can be downloaded from the Internet through the Amver web page or the National Oceanic and Atmospheric Administration web page at: <http://seas.amverseas.noaa.gov/seas/>.

(Supersedes NTM 1(09)02)

(USCG)

(10) INTERNATIONAL AERONAUTICAL AND MARITIME SEARCH AND RESCUE (IAMSAR) MANUAL.

The International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual, Volume III, Mobile Facilities has replaced the Merchant Ship SAR Manual (MERSAR). IAMSAR Manual, Volume III, Mobile Facilities, is intended to be carried aboard rescue units, aircraft, and vessels to help with performance of a search, rescue, or on-scene coordinator function and with aspects of search and rescue that pertain to their own emergencies. This Manual can be purchased directly from IMO or from selected book sellers around the world as provided under "Publication Catalogue" on IMO web page: www.imo.org. It is available in the English, French, Russian, and Spanish languages.

(Supersedes NTM 1(10)02)

(USCG)

(11) SPECIAL REPORTING INSTRUCTIONS FOR U.S. FLAG VESSELS, VESSELS CARRYING WAR RISK INSURANCE, AND CERTAIN OTHER DESIGNATED VESSELS (Formerly USMER Vessels).

According to a U.S. Maritime Administration regulation effective 1 August 1983, U.S. flag vessels and foreign-flag "War Risk" vessels must report and regularly update their voyages to the Amver Center.

Who Must Report

- A. U.S.-flag vessels of one thousand gross tons or more, operating in foreign commerce.
- B. Foreign-flag vessels of one thousand gross tons or more, for which an Interim War Risk Insurance binder has been issued under the provisions of Title XXI, Merchant Marine Act, 1936.

Who May Report

Other merchant vessels, when approved by MARAD, whose owners may have chosen to participate and to have voyage information forwarded to MARAD. (Other merchant vessels may participate in Amver, but information provided by them will be released only for safety purposes or to satisfy certain advance arrival notification requirements of Title 33, Code of Federal Regulations.)

When to Report

- A. Sailing plans may be sent days or even weeks prior to departure, but no later than departure.
- B. Departure Report must be sent as soon as practicable upon leaving port.
- C. Position Report must be sent within twenty-four hours of departure, and subsequently no less frequently than every forty-eight hours until arrival.
- D. Arrival Report must be sent immediately prior to or upon arrival at the Port of Destination.
- E. Reports are to be sent during the Radio Officer's normal duty hours, but no later than the above schedule.
- F. At the discretion of the vessel, reports may be sent more frequently than the above schedule, as, for example, in heavy weather or under other adverse conditions.

(Repetition NTM 1(11)02)

(USCG)

(12) URGENCY AND SAFETY SIGNALS.

The radiotelephone urgency signal, which is the group of words PAN PAN (pronounced "Pahn-Pahn") spoken three times, is provided for use in cases in which a ship making a call has a very urgent message to transmit concerning the safety of a ship, aircraft, or other vehicle, or the safety of a person, but it does not necessarily imply that the ship is in imminent danger or requires immediate assistance. The call has priority over all other communications except distress calls and it should be used in all urgent cases in which the sending out of the SOS or MAYDAY signal is not fully justified.

The urgency signal and message may be addressed to all stations or to a specific station. The urgency signal may also be used when the Master of a ship desires to issue a warning that circumstances are such that it may become necessary for him to send out the distress signal at a later stage. The message must be canceled as soon as any action is no longer necessary.

The radiotelephone SAFETY signal "SECURITE" (pronounced "SAY-CUR-I-TAY") spoken three times, is provided for reporting hazards to navigation or meteorological warnings including dangers regarding ice, derelicts, tropical storms, etc.

(Repetition NTM 1(12)02)

(USCG)

(13) SUBMARINE EMERGENCY IDENTIFICATION SIGNALS AND HAZARD TO SUBMARINES.

1. U.S. submarines are equipped with signal ejectors which may be used to launch identification signals, including emergency signals. Two general types of signals may be used: smoke floats and flares or stars. A combination signal which contains both smoke and flare of the same color may also be used. The smoke floats, which burn on the surface, produce a dense, colored smoke for a period of fifteen to forty-five seconds. The flares or stars are propelled to a height of three hundred to four hundred feet from which they descend by small parachute. The flares or stars burn for about twenty-five seconds. The color of the smoke or flare/star has the following meaning:
 - a) GREEN-Used under training exercise conditions only to indicate that a torpedo has been fired or that the firing of a torpedo has been simulated.
 - b) YELLOW-Indicates that submarine is about to come to periscope depth from below periscope depth. Surface craft terminate antisubmarine counter-attack and clear vicinity of submarine. Do not stop propellers.
 - c) RED-Indicates an emergency condition within the submarine and that it will surface immediately, if possible. Surface ships clear the area and stand by to give assistance after the submarine has surfaced. In case of repeated red signals, or if the submarine fails to surface within reasonable time, she may be assumed to be disabled. Buoy the location, look for submarine buoy and attempt to establish sonar communications. Advise U.S. Naval authorities immediately.
 - d) WHITE-Two white flares/smoke in succession indicates that the submarine is about to surface, usually from periscope depth (non-emergency surfacing procedure). Surface craft should clear the vicinity of the submarine.
2. A Submarine Marker Buoy consists of a cylindrically shaped object about 3 feet by 6 feet with connecting structure and is painted international orange. The buoy is a messenger buoy with a wire cable to the submarine; this cable acts as a downhaul line for a rescue chamber. The buoy may be accompanied by an oil slick release to attract attention. A submarine on the bottom in distress and unable to surface will, if possible, release this buoy. If an object of this description is sighted, it should be investigated and U.S. Naval Authorities advised immediately.
3. Transmission of the International Distress Signal (SOS) will be made on the submarine's sonar gear independently or in conjunction with the red emergency signal as conditions permit.
4. Submarines may employ any or all of the following additional means to attract attention and indicate their position while submerged:
 - a) Release of dye marker.
 - b) Ejection of oil.
 - c) Release of air bubble.
 - d) Pounding on the hull.
5. United States destroyer-type vessels in international waters will, on occasion, stream a towed underwater object at various speeds engaged in naval maneuvers. All nations operating submarines are advised that this underwater object in the streamed condition constitutes a possible hazard to submerged submarines.

(Repetition NTM 1(13)02)

(U.S. NAVY)

(14) RULES, REGULATIONS AND PROCLAMATIONS ISSUED BY FOREIGN GOVERNMENTS.

The National Imagery and Mapping Agency, as a means of promoting maritime safety, includes in its publications rules, regulations, and proclamations affecting navigation as issued by foreign nations.

In this connection, it should be clearly understood that the publication of such material is solely for information relative to the navigational safety of shipping, and in no way constitutes a legal recognition by the United States of the international validity of any rule, regulation, or proclamation so published. While every effort is made to publish all such information, the National Imagery and Mapping Agency cannot assume any liability for failure to publish any particular rule, regulation, proclamation, or the details thereof.

(Repetition NTM 1(14)02)

(NIMA/PTNM)

(15) WARNING-DANGER FROM SUBMARINE CABLES AND PIPELINES.

Submarine cables or pipelines pass beneath various navigable waterways throughout the world. Installation of new submarine cables and pipelines may be reported in the Notice to Mariners; their locations may or may not be charted. Where feasible, warning signs are often erected to warn the mariners of their existence. In view of the serious consequences resulting from damage to submarine cables and pipelines, vessel operators should take special care when anchoring, fishing or engaging

(15) WARNING-DANGER FROM SUBMARINE CABLES AND PIPELINES. (Continued).

in underwater operations near areas where these cables or pipelines may exist or have been reported to exist.

Certain cables carry high voltages; many pipelines carry natural gas under high pressure or petroleum products. Electrocutation, fire or explosion with injury or loss of life or a serious pollution incident could occur if they are penetrated. Vessels fouling a submarine cable or pipeline should attempt to clear without undue strain. Anchors or gear that cannot be cleared should be slipped; no attempt should be made to cut a cable or pipeline.

(Repetition NTM 1(16)02)

(USCG)

(16) CAUTION-CLOSE APPROACH TO MOORED OFFSHORE AIDS TO NAVIGATION.

Courses should invariably be set to pass these aids with sufficient clearance to avoid the possibility of collision. Errors of observation, current and wind effects, other vessels in the vicinity, and defects in steering gear may be, and have been, the cause of collisions. Experience shows that buoys cannot be safely used as leading marks to be passed close aboard, and should always be left broad off the course whenever sea room permits.

It should be borne in mind that most large buoys are anchored to a very long scope of chain and, as a result, the radius of their swinging circle is considerable. The charted position is the approximate location. Furthermore, under certain conditions of wind and current, they are subject to sudden and unexpected sheers which are certain to hazard a vessel attempting to pass close aboard.

Further warning on use of floating aids to navigation for position taking is contained in paragraph 1 of this Notice. When approaching an offshore light structure, large navigational buoy, or a station on a submarine site, on radio bearings, the risk of collision will be lessened by ensuring that the radio bearing does not remain constant.

(Repetition NTM 1(16)02)

(USCG)

(17) PIPELINE LAYBARGES AND JETBARGES.

With the increased number of pipeline laying operations in the Gulf of Mexico and other areas, operators of all types of vessels should be aware of the dangers of passing close aboard, close ahead, or close astern of a jetbarge or pipelaying barge. Pipelaying barges and jetbarges usually move at 1/2 knot or less and have anchors which extend out approximately 3500-5000 feet in all directions, and may be marked by lighted anchor buoys. The exposed pipeline behind the pipelaying barge and the areas in the vicinity of anchors are hazardous to navigation and should be avoided. The pipeline and anchor cables also represent a submerged hazard to navigation. It is suggested, if safe navigation permits, for all types of vessels to pass well ahead of the pipelaying barge or well astern of the jetbarge. The pipelaying barge, jetbarge, and attending vessels may be contacted on VHF-FM Channel 16 for passage instructions.

(Repetition NTM 1(17)02)

(USCG)

(18) REQUIRED REPORTING OF DAMAGED U.S. AIDS TO NAVIGATION.

It frequently occurs that aids to navigation are collided with, causing damage and displacement, or complete loss, without the knowledge of the Coast Guard District Commander. The replacement or repair of such aids is consequently often not made as promptly as desired. This situation results in diminished protection for marine traffic, and is attributable in large part to the failure of vessel operators to furnish notice of these collisions to the nearest local or district office of the U.S. Coast Guard, or to Coast Guard Headquarters, as required by law and regulation. The prompt submission of notice of any marine casualty or accident, including damage or destruction of aids to navigation, is required by the Marine Investigation Regulations, Section 4.05-20 of Title 46, Code of Federal Regulations, with penalty for noncompliance.

(Repetition NTM 1(18)02)

(USCG)

(19) OIL POLLUTION-COMPLIANCE WITH THE CLEAN WATER ACT.

The Federal Water Pollution Control Act (FWPCA) prohibits the discharge of quantities of either oil or hazardous substances which may be harmful into or upon the navigable waters of the United States. This prohibition also applies to adjoining shorelines, waters of the contiguous zone, activities connected with the Outer Continental Shelf Lands Act (OSLA) and Deepwater Port Act of 1974, and such discharges which may affect natural resources belonging to the United States or under

(19) OIL POLLUTION-COMPLIANCE WITH THE CLEAN WATER ACT. (Continued).

its exclusive management authority, including those resources under the Fishery Conservation and Management Act of 1976. Furthermore, in the event a spill does occur in violation of the Act the person in charge of a vessel or onshore or offshore facility is required to notify the Coast Guard as soon as he has knowledge of the spill. Such notification is to be by the most rapid means available to the National Response Center (1-800-424-8802, nationwide 24 hour number).

(Repetition NTM 1(19)02)

(USCG)

(20) COMPLIANCE WITH THE ACT TO PREVENT POLLUTION FROM SHIPS.

The Act to Prevent Pollution from ships (33 U.S.C. 1901) implements into U.S. law the International Convention for the Prevention of Pollution from Ships, as modified by the Protocol of 1978 (MARPOL 73/78). Under the Act, the U.S. Coast Guard is responsible for inspecting and certifying that U.S. vessels meet the applicable requirements. Annex I of MARPOL 73/78 deals with oil and oily waste, Annex II with hazardous chemicals and other substances referred to as Noxious Liquid Substances (NLS), and Annex V deals with the prevention of marine pollution by plastics and other garbage produced during vessel operations.

Annex I of MARPOL 73/78 is applicable to oceangoing tankers over 150 gross tons and all other oceangoing ships over 400 gross tons. The MARPOL 73/78 requirements include oily waste discharge limitations, oily-water separating equipment, monitoring and alarm systems for discharges from cargo areas, cargo pump rooms and machinery space bilges. Ships to which Annex I MARPOL 73/78 is applicable are also required to have an International Oil Pollution Prevention (IOPP) Certificate verifying that the vessel is in compliance with the requirements of MARPOL 73/78 and that any required equipment is on board and operational. Vessels must also maintain an Oil Record Book recording all oil transfers and discharges. The Oil Record Book is available from the USCG Supply Center Baltimore or any local Captain of the Port.

Annex II of MARPOL 73/78 is applicable to oceangoing vessels and non-self propelled oceangoing ships which carry Noxious Liquid Substances (NLS) in bulk. The Annex II requirements include discharge restrictions for various classes of cargo residues; the maintenance of a Cargo Record Book for recording all NLS cargo and residue transfers and discharges; and a Procedures and Arrangements Manual describing the correct procedures for off loading and prewashing cargo tanks.

Annex II NLS cargoes are classified in one of four categories, A, B, C, or D. Category A is the most hazardous to the environment. Category A and other substances which tend to solidify in tanks must be prewashed in port under the supervision of a Prewash Surveyor prior to departure from the off loading terminal. Vessel discharges must be underwater when discharge at sea is allowed. Tanks which carry Category B and C NLS must be tested to ensure that after tank stripping only a minimal amount of residues will remain. Reception facilities must be able to assist in cargo stripping operations by reducing back pressure during the final stages of off loading.

Terminals and ports receiving oceangoing tankers, or any other oceangoing ships of 400 GT or more, carrying residues and mixtures containing oil, or receiving oceangoing ships carrying NLSs, are required to provide adequate reception facilities for the wastes generated. Coast Guard Captains of the Port issue a Certificate of Adequacy to terminals or ports to show that they are in compliance with federal reception facility requirements. An oceangoing tanker or any other oceangoing ship of 400 GT or more required to retain oil or oily residues and mixtures on board and an oceangoing ship carrying a Category A, B or C NLS cargo or NLS residue in cargo tanks that are required to be prewashed, may not enter any port or terminal unless the port or terminal holds a valid Certificate of Adequacy or unless the ship is entering under force majeure.

Annex V is applicable to all recreational, fishing, uninspected and inspected vessels, and foreign flag vessels on the navigable waters and all other waters subject to the jurisdiction of the United States, out to and including the Exclusive Economic Zone (200 miles).

Annex V prohibits the disposal of any and all plastic material from any vessel anywhere in the marine environment. Dunnage, lining and packing materials which float may be disposed of beyond 25 miles from the nearest land. Other garbage that will not float may be disposed of beyond 12 miles of land, except that garbage which can pass through a 25mm mesh screen (approximately 1 square inch) may be disposed of beyond 3 miles. Dishwater is not to be considered garbage within the meaning of Annex V when it is the liquid residue from the manual or automatic washing of dishes or cooking utensils. More restrictive disposal regimes apply in waters designated "Special Areas." This Annex requires terminals to provide reception facilities at ports and terminals to receive plastics and other garbage from visiting vessels.

(20) COMPLIANCE WITH THE ACT TO PREVENT POLLUTION FROM SHIPS. (Continued).

MARPOL 73/78 requires the immediate reporting of any unpermitted discharges of oil or other substances. The civil penalty for each violation of MARPOL 73/78 is not more than \$25,000 per day. The criminal penalty for a person who knowingly violates the MARPOL Protocol, or the regulations (33 CFR 151, 155, 157, and 158), consists of a fine of not more than \$250,000 and/or imprisonment for not more than 5 years; U.S. law also provides criminal penalties up to \$500,000 against organizations which violate MARPOL.

International Safety Management (ISM) Code Implementation: Compliance with the ISM Code is mandatory for passenger ships, and oil and chemical tankers, gas carriers, bulks carriers, and cargo high speed craft over 500 Gross Ton engaged on international voyages. Other cargo ships and MODUs over 500 GT must comply by July 1, 2002. To demonstrate compliance, vessels must present copies of approved Documents of Compliance and Safety Management Certificates to Coast Guard Port State control Boarding Officers during routine compliance examinations. ISM compliance demonstrates that vessel operators have safety and environmental policies, emergency response procedures, designated accident and code non-conformity reporting procedures, and on board maintenance and operating manuals. If inbound vessels are not in compliance with ISM Code after the implementation dates of July 1, 1998 or 2002, they will be denied entry into U.S. waters.
(Repetition NTM 1(20)02) (USCG)

(21) PACKAGED MARINE POLLUTANTS-COMPLYING WITH MARPOL ANNEX III.

On October 1, 1993, new regulations under the Hazardous Materials Transportation Act (HMTA) took effect, implementing MARPOL Annex III in the United States. MARPOL Annex III deals with the prevention of marine pollution by harmful substances in packaged form.

Annex III of MARPOL 73/78 applies to all ships carrying harmful substances in packaged form. Annex III provides standards for stowage, packing, labeling, marking, and documentation of substances identified as marine pollutants in the International Maritime Dangerous Goods Code (IMDG Code). On 5 November 1992, the U.S. Research and Special Programs Administration (RSPA) amended the Hazardous Materials Regulations (HMR, 49 CFR 100-177) to list and regulate these marine pollutants in all modes of transportation. Under the HMR, marine pollutants are listed in a separate appendix, and a "marine pollutant mark" is required for those materials. The marine pollutant mark is used in addition to any existing labels or placards designating a hazardous substance.

Marine pollutants are divided into two classes: marine pollutants and severe marine pollutants. A solution or mixture containing 10% or more of any marine pollutant falls into the class of "marine pollutant." The "severe marine pollutant" class consists of those materials that contain 1% or more of any specified "severe marine pollutant" substance. Marine pollutants that do not meet the criteria for any other hazard class are transported as an environmentally hazardous substance, solid or liquid, N.O.S. (class 9).
(Repetition NTM 1(21)02) (USCG)

(22) POLLUTION-OCEAN DUMPING.

The Marine Protection Research and Sanctuaries Act of 1972, as amended (33 USC 1401 et seq.), regulates the dumping of all material, except fish waste, into ocean waters. Radiological, chemical and biological warfare agents and other high level radioactive wastes are expressly banned from ocean disposal. The Army Corps of Engineers issues permits for the disposal of dredged spoils; the Environmental Protection Agency is authorized to issue permits for all other dumping activities. Surveillance and enforcement to prevent unlawful transportation of material for dumping or unlawful dumping under the Act has been assigned to the U.S. Coast Guard. The Act provides civil penalties of up to \$50,000 and criminal penalties of up to \$50,000 and/or one year imprisonment.
(Repetition NTM 1(22)02) (USCG)

(23) WARNING-POSSIBLE DANGER FROM UNLABELED INTERMODAL CONTAINERS AND DRUMS.

With the many exotic chemicals being transported in inter-modal freight containers and in drums as deck cargo, increasingly more reports are received regarding the loss overboard of these potentially dangerous cargo-carrying units. Empty containers and drums may contain residues which may be extremely hazardous to touch or smell, and vapors emanating from these packages may be explosive.

(23) WARNING-POSSIBLE DANGER FROM UNLABELED INTERMODAL CONTAINERS AND DRUMS.**(Continued).**

When encountering derelict inter-modal containers and drums, whether afloat or from the sea bottom, the dangers listed above should be considered. Identifying labels will give adequate warning, but containers and drums are more likely to be found with caution labels washed away. All inter-modal freight containers have unique identifying numbers, which should be included in any sighting report if visible from a safe distance. Avoid direct contact and notify U.S. Coast Guard of any sightings in U.S. coastal waters (24 HR TOLL FREE reporting number 1-800-424-8802), or government authorities of the nearest port state if sighting is near any foreign shores.

(Repetition NTM 1(23)02)

(USCG)

(24) REPORTING OF DANGERS TO NAVIGATION.

Mariners will occasionally discover uncharted shoals, malfunctions of important navigational aids or other dangerous situations that should be made known to other navigators. Those items that can be classified as urgent should be reported by any rapid means to the closest responsible charting authority. The general criterion for important data is "that information, without which, a mariner might expose his vessel to unnecessary danger." Reports to the U.S. Coast Guard and to foreign authorities can be made via radio using voice, SITOR and Digital Selective Calling (DSC), via TELEX, or via satellite using telephone and fax. Reports to NIMA in Bethesda, MD can be made via Defense Messaging System (DMS) (NIMA NAVSAFETY BETHESDA MD) message, TELEX, telephone, fax and e-mail.

Guidance in preparing reports of dangers to navigation and specific radio frequencies, addresses and telephone numbers are contained in NIMA Pub. 117, Radio Navigational Aids. Reports should be brief, but must contain:

What - Description of danger

When - GMT and date

Where - Latitude and Longitude (Reference chart in use.)

Who - Reporting vessel and observer

Additionally, mariners are requested to notify NIMA of discrepancies in charts and publications, using the Marine Information Report and Suggestion Sheet found in the back of each Notice to Mariners.

(Supersedes NTM 1(24)02)

(NIMA/PTNM)

(25) VESSEL BRIDGE-TO-BRIDGE RADIOTELEPHONE REGULATIONS.

APPLICATION: These regulations contain watch and equipment requirements for VHF-FM Radiotelephone. The regulations apply to the following vessels (including recreational, uninspected, and military vessels) while underway on the navigable waters of the U.S. (e.g. on internal rivers and tributaries and seaward out to twelve nautical miles off the coast):

- (1) Every power-driven vessel 20 meters or greater in length;
- (2) Every vessel of 100 gross tons and upwards carrying one or more passengers for hire while navigating;
- (3) Every towing vessel 26 feet or over in length while navigating; and
- (4) Every dredge and floating plant engaged in or near a channel or fairway in operations likely to restrict or affect navigation of other vessels except for an unmanned or intermittently manned floating plant under the control of a dredge.

WATCH ON CHANNEL 13: The master, operator, or whoever is designated to pilot the vessel, must maintain a listening watch on the designated bridge-to-bridge frequency while underway on the navigable waters of the United States. The designated frequency is VHF-FM Channel 13 (except on portions of the lower Mississippi River where Channel 67 is the designated frequency). The person maintaining the watch must also be able to communicate in English.

WATCH ON CHANNEL 16: In addition to the Channel 13 watch, vessels must keep a continuous watch on VHF-FM Channel 16 (International Distress and Calling Channel) while underway, or when participating in and monitoring a Vessel Traffic Service (VTS) Channel.

(25) VESSEL BRIDGE-TO-BRIDGE RADIOTELEPHONE REGULATIONS. (Continued).

VOLUNTARY STATIONS: Vessels not subject to the Vessel Bridge-to-Bridge Regulations although not required to have a VHF-FM radio onboard, must maintain a watch on Channel 16 whenever the radio, if on board, is operating (i.e. energized) and is not being used to communicate on other channels.

PASSING ARRANGEMENTS: A vessel that reaches agreement with another vessel in a head-on, crossing, or overtaking situation, by using the radiotelephone as prescribed by the Vessel Bridge-to-Bridge Radiotelephone Act, is not obliged to sound the whistle signals prescribed by this rule, but may do so. If agreement is not reached, then whistle signals shall be exchanged in a timely manner and shall prevail (Inland Navigation Rule 34(h)).

Note: Such "passing arrangements" are not recognized under the International Regulations for Preventing Collisions at Sea (COLREGS).

MORE INFORMATION: The Vessel Bridge-to-Bridge Radiotelephone Regulations can be found in the Coast Guard publication Navigation Rules: International-Inland, (COMDTINST M16672.2D), additional VHF-FM Radiotelephone regulations can be found in Title 47, Part 80, Title 33, Part 26 of the Code of Federal Regulations, and Title 33, U.S. Code 1201 et seq. For questions, write to: Commandant (G-MWV), U.S. Coast Guard, 2100 2nd Street, SW, Washington, D.C. 20593-0001. Tel: (202) 267-0407 or visit: <http://www.uscg.mil/vtm/pages/rules.htm>.

(Supersedes NTM 1(25)02)

(USCG)

(26) SEISMIC SURVEYS.

Details of seismic surveys may be broadcast to mariners via HYDROLANT, HYDROPAC, NAVAREA IV and NAVAREA XII broadcast systems. Surveys can be conducted without prior notification or broadcast warnings.

Survey vessels may operate alone or in company with other surface vessels or submersibles. Survey vessels may be towing cables in excess of 2 miles astern. Cables may be marked by buoys and may be towed on the surface or submerged.

During a survey, repeated shock waves are created by using explosive charges, compressed air, mechanical vibrators or by electrical means at any level from the bottom to the surface. Vessels surveying may be underway but sometimes are stopped for extended periods.

Seismic survey vessels which are unable to maneuver are required to carry the lights and signals described in Rule 27 of International Regulations for Preventing Collisions at Sea. These vessels should be given a wide berth.

Charges may be contained in a variety of cylinders, tubes, or bags which may not be marked as dangerous. No attempt to recover such items should be made. Any suspicious charge-like containers inadvertently taken aboard by trawls or any other means should be carefully handled and jettisoned immediately if possible.

(Repetition NTM 1(26)02)

(NIMA/PTNM)

(27) UNITED STATES-CAUTION REGARDING SUBMARINE OPERATIONS.

Boundary limits and designations of submarine operating areas are shown on the charts in magenta or purple lines. As submarines may be operating in these areas, vessels should proceed with caution. During torpedo practice firing, all vessels are cautioned to keep well clear of naval target vessels flying a large red flag where it may best be seen.

During the past a number of potentially dangerous incidents have occurred. Ships have entered Fleet Operating Areas in which UDT (Underwater Demolition Teams) or SEAL (Sea, Air, and Land) Teams were conducting scheduled operations from a submerged submarine. These operations were being conducted in a specific area assigned for that purpose. These submerged operations ordinarily involve transferring swimmers in and out of a submarine while submerged. In this situation, movements of the submarine must be restricted in course, speed, and depth. Furthermore, emergency surfacing could prove hazardous and result in loss of life to swimmers. Therefore, when conducting operations of this type the submarine and swimmer detachment are relatively immobile and are helpless to evade approaching ships passing through their area. There is also a real danger that a well-intentioned ship, unaware of these operations, might turn in the submarine's direction to investigate rubber raft, swimmers, or submarine periscope.

Notice of date and time prior to any subsurface operations should be provided to Commander Submarine Force, U.S. Atlantic Fleet, 7958 Blandy Rd., Norfolk, VA 23551-2492.

(Repetition NTM 1(27)02)

(U.S. NAVY)

(28) SPECIAL RULES WITH RESPECT TO ADDITIONAL STATION AND SIGNAL LIGHTS FOR NAVY SHIPS.

1. Man overboard lights.-Naval vessels may display, as a means of indicating man overboard, two pulsating, all around red lights in a vertical line located on a mast from where they can best be seen.
2. Yard arm signaling lights.-Naval vessels may display, as a means of visual signaling, white all around lights at the end of the yardarms. These lights will flash in varying sequences to convey the intended signal.
3. Aircraft warning lights.-Naval vessels may display, as a means of indicating the presence of an obstruction to low flying aircraft, one or two all around red lights on each obstruction.
4. Underway replenishment contour lights.-Naval vessels may display, as a means of outlining the contour of the delivery ship during night time underway replenishment operations, red or blue lights at deck edge extremities. These lights are being converted to blue, vice red, therefore either color may be seen until conversion is complete.
5. Minesweeping station keeping lights.-Naval vessels engaged in minesweeping operations may display, as an aid in maintaining a prescribed interval and bearing, two white lights in a vertical line visible from 070 through 290 degrees relative.
6. Submarine identification light.-Submarines may display, as a distinctive means of identification, an intermittently flashing amber beacon located where it can best be seen, as near as practicable, all around the horizon.
7. Special operations lights.-Naval vessels may display, as a means of coordinating certain operations, a revolving beam colored red, green or amber, located on either yardarm or mast platform from where it can be seen all around the horizon.
8. Convoy operations stern light.-Naval vessels may display, during periods of convoy operations, a blue light located near the stern, with the same characteristics as, but in lieu of, the normal white stern light.
9. Wake illumination light.-Naval vessels may display a white light located near the stern to illuminate the wake.
10. Flight operations lights.-Naval vessels engaged in night flight operations may display various arrangements of light systems containing combinations of different colored lights as a means of assisting in the launch and recovery of aircraft and enhancing flight safety. These light systems will be located at various points on the vessels, depending on the vessel type and nature of the flight operations being conducted.
11. Amphibious operations lights.-Naval vessels engaged in night amphibious operations may display various arrangements of light systems containing combinations of different colored lights as a means of assisting in the launch and recovery of assault craft and enhancing the safety of the amphibious operation. These light systems will be located at various points on the vessels, depending on the vessel type and the nature of the amphibious operations being conducted.
12. Minesweeping polarity signal lights.-Naval vessels engaged in minesweeping operations may display either a red or green light on each side of vessel.
13. Replenishment-at-sea floodlights.-Naval vessels engaged in replenishment-at-sea operations may display various arrangements of floodlights of different colors for general illumination of equipment, work areas, and cargo being transferred between ships. These lights will be located at various points on the vessels, depending on the vessel type and location of the replenishment-at-sea handling areas.
14. Replenishment-at-sea cargo transfer signal lights.-Naval vessels engaged in replenishment-at-sea operations may display one or more red light signal devices on the delivery side of the vessels. These devices display various combinations of lights to indicate type of cargo being transferred.
15. Replenishment-at-sea truck light.-Naval vessels engaged in replenishment-at-sea operations may display one or more red all-round light(s) located on a mast to assist the receiving vessel in approaching the delivery vessel.
16. Replenishment-at-sea lights.-Naval aircraft carriers and similar type vessels may display two all-round lights installed along the forward starboard flight deck edge to indicate the fore-and-aft axis when the aircraft carrier or similar type vessel is the delivery vessel.

(Repetition NTM 1(28)02)

(U.S. NAVY)

**(29) UNITED STATES NAVAL VESSELS-NAVIGATIONAL LIGHT WAIVERS-DISTINCTIVE LIGHTS
AUTHORIZED FOR NAVAL VESSELS.**

1. All ships are warned that, when U.S. Naval vessels are met on the high seas or on navigable waters of the United States during periods when navigational lights may be displayed; certain navigational lights of some naval vessels may vary from the requirements of the Regulations for Preventing Collisions at Sea, 1972, and rules applicable to the navigable waters of the United States, as to number, position, range of visibility or arc of visibility. These differences are necessitated by reasons of military function or special construction of the naval ships. An example is the aircraft carrier where the two masthead lights are considerably displaced to starboard from the center or keel line of the vessel when viewed from ahead. Certain other naval vessels cannot comply with the horizontal separation requirements of the masthead lights, and the two masthead lights on even larger naval vessels, such as some cruisers, will thus appear to be crowded together when viewed

**(29) UNITED STATES NAVAL VESSELS-NAVIGATIONAL LIGHT WAIVERS-DISTINCTIVE LIGHTS
AUTHORIZED FOR NAVAL VESSELS. (Continued).**

from a distance. Other naval vessels may also have unorthodox navigational light arrangements or characteristics when seen either underway or at anchor.

2. Naval vessels may also be expected to display certain other lights. These lights include, but are not limited to, different colored recognition light signals, and aircraft landing lights. These lights may sometimes be shown in combination with navigational lights.
3. During naval maneuvers, naval ships, alone or in company, may also dispense with showing any lights, though efforts will be made to display lights on the approach of shipping.
4. Naval vessels, except for aircraft carrier types (CV, CVN, AVT, LHA, LHD, MCS and LPH), may dispense with showing the masthead lights during operations or maneuvers in which the vessels are restricted in ability to maneuver.

(Repetition NTM 1(29)02)

(CNO)

(30) TRAFFIC SEPARATION SCHEMES, AREAS TO BE AVOIDED, AND RECOMMENDED TRACKS.

To increase the safety of navigation, particularly in converging areas of high traffic density, routes incorporating traffic separation have been adopted by the IMO in certain areas of the world. In the interest of safe navigation, it is recommended that through traffic use these schemes, as far as circumstances permit, by day and by night and in all weather conditions.

An area to be avoided is a routing measure comprising an area within defined limits, in which either navigation is particularly hazardous or it is exceptionally important to avoid casualties, and which should be avoided by all ships, or certain classes of ships.

Recommended tracks are routes, generally found to be free of dangers, which ships are advised to follow to avoid possible hazards nearby.

The International Maritime Organization (IMO) is recognized as the only international body responsible for establishing and recommending measures on an international level concerning ships' routing. In deciding whether or not to adopt or amend a traffic separation scheme, IMO will consider whether the scheme complies with the design criteria for traffic separation schemes and with the established methods of routing. IMO also considers whether the aids to navigation proposed will enable mariners to determine their position with sufficient accuracy to navigate the scheme in accordance with Rule 10 of the International Regulations for Preventing Collisions at Sea (72 COLREGS).

General principles for navigation in traffic separation schemes are as follows:

1. A ship navigating in or near a traffic separation scheme adopted by IMO shall in particular comply with Rule 10 of the 72 COLREGS to minimize the development of risk of collisions with another ship. The other rules of the 72 COLREGS apply in all respects, and particularly the steering and sailing rules if risk of collision with another ship is deemed to exist.
2. Traffic separation schemes are intended for use by day and by night in all weather, ice-free waters or under light ice conditions where no extraordinary maneuvers or assistance by icebreaker(s) is required.
3. Traffic separation schemes are recommended for use by all ships unless stated otherwise. Bearing in mind the need for adequate underkeel clearance, a decision to use a traffic separation scheme must take into account the charted depth, the possibility of changes in the sea-bed since the time of last survey, and the effects of meteorological and tidal conditions on water depths.
4. A deep water route is an allied routing measure primarily intended for use by ships which require the use of such a route because of their draft in relation to the available depth of water in the area concerned. Through traffic to which the above consideration does not apply should, if practicable, avoid following deep water routes. When using a deep water route mariners should be aware of possible changes in the indicated depth of water due to meteorological or other effects.
5. The arrows printed on charts merely indicate the general direction of traffic; ships should not set their courses strictly along the arrows.
6. Vessels should, so far as practicable, keep clear of a traffic separation line or separation zone.
7. Vessels should avoid anchoring in a traffic separation scheme or in the area near its termination.
8. The signal "YG" meaning "You appear not to be complying with the traffic separation scheme" is provided in the International Code of Signals for appropriate use.

NOTE.-Several governments administering traffic separation schemes have expressed their concern to IMO about the large number of infringements of Rule 10 of the 72 COLREGS and the dangers of such contraventions to personnel, vessels and environment. Several governments have initiated surveillance of traffic separation schemes for which they are responsible

**(30) TRAFFIC SEPARATION SCHEMES, AREAS TO BE AVOIDED, AND RECOMMENDED TRACKS.
(Continued).**

and are providing documented reports of vessel violations to flag states. As in the past, the U.S. Coast Guard will investigate these reports and take appropriate action. Mariners are urged to comply at all times with the 72 COLREGS and, in particular, Rule 10 when operating in or near traffic separation schemes.

9. Notice of temporary adjustments to traffic separation schemes for emergencies or for accommodation of activities which would otherwise contravene Rule 10 or obstruct navigation may be made in Notices to Mariners. Temporary adjustments may be in the form of a precautionary area within a traffic lane, or a shift in the location of a lane.
10. The IMO approved routing measures which affect shipping in or near U.S. waters are:

UNITED STATES TRAFFIC SEPARATION SCHEMES

- In the Approaches to Portland, Maine
- In the Approaches to Boston, Massachusetts
- In the Approaches to Narragansett Bay, Rhode Island and Buzzards Bay, Massachusetts
- Off New York
- Off Delaware Bay
- In the Approaches to Chesapeake Bay
- In the Approaches to Galveston Bay
- In the Approaches to Los Angeles-Long Beach
- In the Santa Barbara Channel
- Off San Francisco
- In the Strait of Juan de Fuca and its Approaches
- In Puget Sound and its Approaches
- In Prince William Sound, Alaska

UNITED STATES AREAS TO BE AVOIDED

- Off Washington Coast
- In the region of Nantucket Shoals
- At Louisiana Offshore Oil Port (LOOP) in the Gulf of Mexico
- In the region of the Northwest Hawaiian Islands
- Adjacent to Florida Keys
- In the region of the Channel Islands, California

(Repetition NTM 1(30)02)

(IMO/USCG/NIMA)

(31) FIRING DANGER AREAS.

Firing and bombing practice exercises take place either occasionally or regularly in numerous areas established for those purposes along the coast of practically all maritime countries.

In view of the difficulty in keeping these areas up to date on the charts, and since the responsibility to avoid accidents rests with the authorities using the areas for firing and/or bombing practice, these areas will not as a rule be shown on NIMA charts.

National Ocean Service Charts show firing and bombing practice areas as defined by Code of Federal Regulations (Title 33, Part 334) in United States waters.

Any permanent aid to navigation that may be established to mark a danger area, or any target, fixed or floating, that may constitute a danger to navigation, will be shown on the appropriate charts.

Warning signals, usually consisting of red flags or red lights, are customarily displayed before and during the practice, but the absence of such warnings cannot be accepted as evidence that a practice area does not exist. Vessels should be on the lookout for local warnings and signals, and should, whenever possible, avoid passing through an area in which practice is in progress, but if compelled to do so should endeavor to clear it at the earliest possible moment.

(Repetition NTM 1(31)02)

(NIMA/PTNM)

(32) LORAN INFORMATION.

Loran-C is a long-range hyperbolic radionavigation system using at least three land based radio transmitters (90 to 110 kHz frequency band) and receivers to allow mariners, aviators, and land based navigators to determine their position. Twenty-four Loran-C stations provide position information accurate to less than 0.25 nautical miles for the continental U.S. and most of Alaska. The U.S. Coast Guard operates Loran-C chains in cooperation with Canada and Russia. The accuracy of Loran-C will vary depending on capability of user equipment and location to transmitting stations. Loran-C nautical chart coverage can be found in the National Imagery and Mapping Agency Catalog of Maps, Charts, and Related Products, Part 2-Hydrographic Products, Nautical Charts and Publications (NIMA Stock Number CATP2V01U). Tabular information for Loran-C Rate Publications is no longer available.

(Supersedes NTM 1(32)02)

(USCG/NIMA)

(33) ENDANGERED SPECIES (WHALES AND SEA TURTLES) EASTERN SEABOARD.

NOAA's National Marine Fisheries Service, Office of Protected Resources has advised that several species of endangered whales and endangered and threatened sea turtles inhabit areas along the Eastern Seaboard. Among these is the northern right whale, the world's most endangered large whale species, and collisions with ships are a significant source of mortality in this species. Collisions with whales can also result in significant damage to vessels, most commonly involving bent shafts or damaged propellers. Sea turtles are also susceptible to vessel collision because they surface to breathe and may rest at or near the surface. Nearshore habitat as well as natural and maintained channels may provide food, shelter and migration corridors to sea turtles. Sea turtles also associate with offshore oceanographic fronts and the warm water of the Gulf Stream.

Right whales are vulnerable to vessel collisions. As discussed below, right whales are seasonally abundant in waters off Florida, Georgia, New England and Canada. Right whale advisories and sighting locations are available for these areas via Coast Guard Broadcast Notice to Mariners, NAVTEX and other media.

There are about 300 northern right whales in the North Atlantic, and the species is listed as endangered under the Endangered Species Act. Right whales are highly vulnerable to vessel collisions because they can be difficult to spot, often do not move out of the way of approaching ships, and mate, rest, feed, and nurse their young at the surface.

Right whales occur along the east coast from calving areas off southern Georgia and northern Florida to feeding and mating areas off Massachusetts, in the Gulf of Maine and Bay of Fundy. In the Northeast United States, right whales occur seasonally in Cape Cod Bay (peak season: January through April), the Great South Channel (peak season: April through June), Stellwagen Bank (peak season: January through April), Jeffreys Ledge (peak season: July through mid-December), and the Bay of Fundy (Grand Manan Basin) (peak season: June through December). The first two areas are Federally-designated right whale critical habitats. Stellwagen Bank and Jeffreys Ledge are located in the Federally-designated Gerry E. Studds Stellwagen Bank National Marine Sanctuary. The Grand Manan Basin is a Canadian whale conservation area. Other whale species are present in spring and summer. Juvenile humpback and fin whales frequent near shore waters of the mid-Atlantic year round and are particularly abundant off Virginia and North Carolina in winter. Other whale species are present primarily in spring and summer. Sea turtles occur in coastal waters of Maine through Virginia in summer and fall (May through November).

In the Southeast United States, coastal waters off Georgia and northeastern Florida is the only known calving area for right whales. This area is a Federally-designated right whale critical habitat. The calving season is generally December through March. In March and April, right whales accompanied by calves migrate northward, often within 20 miles of the coast. Juvenile humpback and fin whales frequent near shore waters of the mid-Atlantic year round and are particularly abundant off Virginia and North Carolina during winter. Sea turtles occur year round from North Carolina through Florida; however, they are especially abundant during the spring and summer, just prior to and during the mating season.

Vessel operators should be particularly alert to avoid hitting or disturbing right whales. In seasons and in areas that right whales may occur, vessel operators should maintain a sharp lookout. Field identification cues include a broad back with no dorsal fin, irregular bumpy white patches (callosities) on the head, and a distinctive two-column V-shaped blow. They have paddle-like flippers nearly as wide as they are long, and a broad, deeply notched tail. Right whales reach lengths of 45 to 55 feet and are black in color.

(33) ENDANGERED SPECIES (WHALES AND SEA TURTLES) EASTERN SEABOARD. (Continued).

Two of the best documented ship strikes involved whales being struck and killed by vessels steaming at 15 knots. One vessel was steaming in clear weather and calm seas, just before dusk, and well off the Mid-Atlantic coast, when a small group of whales surfaced about 50 yards off the starboard bow. A juvenile in the group was struck by the ship's propellers and killed. The second vessel was steaming in thick fog, inshore off the southeast coast in early January, when it struck a juvenile, apparently dead-on.

Seasonal right whale advisories and sighting reports are broadcast periodically for these areas by Coast Guard Broadcast Notice to Mariners, NAVTEX, NOAA Weather Radio, Cape Cod Canal Vessel Traffic Control, the Bay of Fundy Vessel Traffic Control, and other means. As weather and conditions permit, a dedicated seasonal program of over flights and vessel surveys are done in Cape Cod Bay and the Great South Channel and from the Savannah River, Georgia south to Sebastian Inlet, Florida. However, many right whales go undetected. Consult *Coast Pilots* for the U.S. East Coast and nautical charts for information on the boundaries of right whale critical habitat and precautionary measures that mariners can take to reduce the likelihood of ship strikes.

To address the problem of ship strikes, NOAA and the U.S. Coast Guard have established a Mandatory Ship Reporting System in the above-mentioned right whale critical habitats. As of July 1, 1999, the system requires all commercial ships 300 gross tons or greater to report to a shore-based station when entering the two habitat areas and provide their name, call sign, course, speed, location, destination and route (see following table). In return, ships will receive an automated message indicating that the ship is entering an area critical for right whales, that whales are likely to be in the area and that ship strikes are a serious threat to whales and may cause damage to the ship. Advice on precautionary measures mariners can take to reduce the possibility of hitting right whales and recent sighting locations are also included. The reporting system requires reporting only and will affect no other aspect of vessel operation. For information about how and when to report, consult Coast Guard Local Notice to Mariners (No. 27/99) and an interim final rule (64 FR 29229) and a final rule (66 FR 5806, 20 November 2001) which provides the regulations. Please note that a change has been made in the reporting procedures since publication of the interim final rule. Vessels must now include an additional paragraph (M), before paragraph (A), which provides the vessel's Inmarsat number. Additional information on the revised reporting procedures may be obtained at the following website:

http://www.nmfs.noaa.gov/prot_res/PR2/Conservation_and_Recovery_Program/msr/msrhome.html

This table identifies requirements for reporting to the mandatory ship reporting system. The change noted above in the requirements is indicated in the first line.

Paragraph	Function	Information Required
System name	System Identifier	Ship reporting system (WHALESNORTH or WHALESSOUTH).
M	Inmarsat number	Vessel Inmarsat number.
A	Ship	Vessel name and call sign.
B	Date, time, and month of report	Six digit group giving day of month and time, single letter indicating time zone, and three letters indicating month.
E	True course	3-digit indicating true course.
F	Speed in knots and tenths	3-digit group indicating knots and tenths
H	Date, time, and point of entry into system	Date and time expressed as in (B) and latitude and longitude expressed as a four digit group giving latitude, the letter N indicating north, followed by a /, a five digit group giving longitude, and the letter W indicating west.
I	Destination and ETA	Name of port and arrival time expressed as in (B).

(33) ENDANGERED SPECIES (WHALES AND SEA TURTLES) EASTERN SEABOARD. (Continued).

Paragraph	Function	Information Required
L	Route information	Route information should be reported as direct rhumbline to port (RL) and intended speed or a series of way points (WP). Vessels reporting waypoints should include latitude and longitude, expressed as in (H), and intended speed between waypoints. For vessels transiting within a traffic separation scheme (TSS), give only the WP on entry and departure of TSS.

The National Marine Fisheries Service recommends the following precautionary measures be taken to reduce the risk of colliding with northern right whales when transiting right whale critical habitat:

1. Consult with local pilots' associations for precautionary measures when transiting right whale critical habitat 1. As soon as possible prior to entering right whale critical habitat areas.
2. As soon as possible prior to entering right whale critical habitat, check Coast Guard Broadcast Notice to Mariners, NAVTEX, the Coast Pilot, local pilots, and other sources for recent right whale sighting reports. In the northern critical habitat area, mariners should also check NOAA Weather Radio, Cape Cod Canal Vessel Traffic Control, and the Bay of Fundy Vessel Traffic Control.
3. To the extent possible, review right whale identification materials and maintain a sharp watch with lookouts familiar with spotting whales.
4. When planning passage through a right whale critical habitat, attempt to avoid night-time transits and, when practical, minimize the distance traveled through the area. Anticipate delays due to whale sightings. When planning passage along the southeast coast during calving season (between 15 November and 15 April), attempt to avoid transit through critical habitat area by remaining offshore, and minimize travel distances through the critical habitat when entering or leaving port. When the ability to spot whales is limited (e.g., night, fog, rain), reduced speed may minimize the risk of colliding with a right whale.
5. Traveling at speeds in excess of 14 knots may increase the likelihood of striking a whale. It is recommended that where possible, and when trip planning allows, ships travel less than 14 knots.
6. If a right whale is reported within 20 nautical miles of a ship's position, post a lookout familiar with spotting whales, exercise caution, and proceed at a safe speed, bearing in mind that reduced speed may minimize the risk of a ship strike.
7. Do not assume right whales will move out of your way. Right whales are generally slow moving and seldom travel faster than 5-6 knots. Consistent with safe navigation, maneuver around observed right whales or recently reported sighting locations. Federal regulation prohibits the approach within 500 yards of any right whale anywhere in the U.S. Atlantic EEZ. The same regulations have been implemented in the State of Massachusetts.
8. Any whale accidentally struck, any dead whale, or any whale observed entangled in fishing gear should be reported immediately to the Coast Guard on VHF channel 16 noting the precise location, date, and time of the accident or sighting. In the event of a strike or sighting, amplifying information such as the speed of the vessel, size of the vessel, water depth, wind speed and direction, description of the impact, fate of the whale, species, and size should be reported if known.
9. Right whales can occur anywhere along the east coast. Therefore, mariners are urged to exercise prudent seamanship with regard to right whales at all times when transiting the U.S. East Coast.

(Supersedes NTM 1(33)02)

(NOAA)

(34) REPORTING DEPTH INFORMATION.

The many ships presently equipped with reliable depth recorders constitute a potential wealth of sounding data desired by charting agencies for the purpose of confirming charted depths or charting heretofore unknown depths. While oceanographic survey vessels remain the primary source of bathymetric data, depth recordings submitted by navy, coast guard and merchant vessels will make an important contribution to the vital task of charting the oceans.

Mariners are encouraged to obtain and report soundings whenever bridge routine and equipment capabilities will allow. The American Practical Navigator (Bowditch) (NVPUB9), Sections 2911-2916 describes the bathymetric requirements and provides some guidance for observing and reporting sonic soundings. However, soundings must be correlated to positions and accompanied by supportive data such as:

(34) REPORTING DEPTH INFORMATION. (Continued).

- (a) Detailed position/time information.
- (b) Mariner's own evaluation of positional accuracy (type of navigational system used and frequency of fixes).
- (c) Ship's course and speed with time of changes noted.
- (d) Echogram scales in use and graduated scales provided, with time of scale changes.
- (e) Draft of vessel and whether zero reference is corrected for draft.
- (f) Regular annotations of date/time marks on echograms to enable correlation with positions.
- (g) State of the tide and weather conditions.
- (h) Other related information considered appropriate.

An uncharted depth of 15 fathoms/28 meters or less should be considered an urgent danger to navigation, and should be reported via radio without delay. Follow up with substantiating evidence, including the echogram, track chart and/or position log and all relevant navigational data and forward to NIMA at the earliest opportunity.

Charts submitted to amplify a sounding report will be replaced, on request, with a new chart, except that foreign charts will be replaced with the equivalent U.S. chart, if available. Data reports and charts should be sent to the National Imagery and Mapping Agency, Attn: PTNM, MS D-44, 4600 Sangamore Road, Bethesda, MD 20816-5003, either directly by mail or via any U.S. Consulate.

(Supersedes NTM 1(34)02)

(NIMA/PTNM)

(35) WARNING-MINED AREAS.

Mines of various types and ages pose a threat to navigation in many parts of the world. Once mined, an area can never be certified to be completely danger free. Sweeping produces only statistical probability of protection. Mines may still remain, having failed to respond to orthodox sweeping methods. Some swept areas have not been covered by modern surveys and may contain uncharted wrecks, shoals or other dangers to navigation.

Prudent seamanship in former mine fields, swept channels and swept areas includes:

- (a) Transit using only established routes or buoyed channels.
- (b) Avoid shallow water. Sweeping techniques often preclude sweeping in restricted waters.
- (c) Avoid fishing, trawling or any other form of submarine or seabed activity.
- (d) Mariners are advised to anchor with caution only in established anchorages.
- (e) Consult local authorities and regulations.

(Repetition NTM 1(35)02)

(U.S. NAVY)

(36) MINED AREAS REPORTED.

Minefields-Tarabulus, Libya.

In early 1973 Libya reported that the following areas had been mined. Although these areas are probably no longer a mine threat, they still represent a potential hazard to navigation. The areas reported by Libya are bounded by lines joining the following positions:

- | | |
|---------------------------------|---------------------------------|
| 1. (a) 32°52'48"N., 13°24'30"E. | 2. (a) 32°53'42"N., 13°20'36"E. |
| (b) 32°57'42"N., 13°24'30"E. | (b) 32°55'54"N., 13°18'00"E. |
| (c) 32°57'42"N., 13°18'00"E. | (c) 32°55'54"N., 13°15'00"E. |
| (d) 32°53'48"N., 13°22'18"E. | (d) 32°54'30"N., 13°15'00"E. |

(Repetition NTM 1(36)02)

(U.S. NAVY)

(37) MINESWEEPING-CAUTION-ATTENTION IS CALLED TO THE FOLLOWING INSTRUCTIONS.**Minesweeping Operations:**

- (a) United States vessels engaged in minesweeping operations or exercises are hampered to a considerable extent in their maneuvering powers. Other Vessels Must Keep Clear of Minesweepers (COLREGS 1972).
- (b) With a view to indicating the nature of the work on which they are engaged, these vessels will show the signals hereinafter mentioned. For the public safety, all other vessels, whether steamers or sailing craft, must endeavor to keep out of the way of vessels displaying these signals and not approach them inside the distances mentioned herein, especially remembering that it is dangerous to pass between the vessels of a pair or group sweeping together.
- (c) All vessels towing sweeps are to show:
BY DAY.-A black ball at the fore mast and a black ball at the end of each fore yard.
BY NIGHT.-All around green lights instead of the black balls, and in a similar manner.
- (d) Vessels or formations showing these signals are not to be approached nearer than 1,000 meters on either beam and vessels are not to cross astern closer than 1,000 meters. Under no circumstances is a vessel to pass through a formation of minesweepers.
- (e) Minesweepers should be prepared to warn merchant vessels which persist in approaching too close by means of any of the appropriate signals from the International Code of Signals.
- (f) In fog, mist, falling snow, heavy rainstorms, or any other conditions similarly restricting visibility, whether by day or night, minesweepers while towing sweeps when in the vicinity of other vessels will sound signals for a vessel towing (1 prolonged blast followed by 2 short blasts).

Helicopters Conducting Minesweeping Operations:

- (a) The United States is increasingly employing helicopters to conduct minesweeping operations or exercises. When so engaged, helicopters, like vessels, are considerably hampered in their ability to maneuver. Accordingly, surface craft approaching helicopters engaged in minesweeping operations should take safety precautions similar to those described in (b) and (d) above with respect to minesweeping vessels.
- (b) Helicopters towing minesweeping gear and accompanying surface escorts, if any, will use all available means to warn approaching ships of the operations or exercises being conducted. Also, measures will be taken where practicable to mark or light the gear or objects being towed.
- (c) Minesweeping helicopters are equipped with a rotating beacon which has selectable red and amber modes. The amber mode is used during towing operations to notify/warn other vessels that the helicopter is towing. While towing, the helicopter's altitude varies from 15 to 95 meters above the water and speeds vary from 0 to 30 knots.
- (d) General descriptions and approximate dimensions for towed minesweeping gear currently being used in conjunction with helicopters are as follows:
 - (1) Mechanical sweep gear consisting, in part, of large lengths of submerged cables and explosive cutters. The only items normally visible on the surface are three to five international orange floats, depending upon the quantity of gear in use, which generally define the dimensions of the tow. The maximum width is 100 meters and the maximum distance behind the helicopter is 600 meters.
 - (2) Acoustical sweep device weighing approximately 70 pounds. This device is towed behind the helicopter on a 250-meter orange polypropylene tow cable. When dead in the water, the gear will rise to the surface, supported by a yellow float.
 - (3) A hydrofoil platform containing equipment used for magnetic influence sweeping. The platform is towed on the end of a 140-meter cable and trails electrodes in the water which extend 185 meters behind the platform. Very often, the aforementioned acoustical sweep device is towed in conjunction with this platform by attaching it to the end of one of the electrodes by a 30-meter polypropylene tow line. In this configuration, the total length of the tow is 215 and 350 meters, respectively, behind the hydrofoil platform and helicopter. Special care must be exercised when crossing astern of the hydrofoil platform as the towed cable is barely visible, and the attached acoustic device is submerged just beneath the surface and is not visible to surface vessels.
 - (4) Helicopters employed in minesweeping operations and their tows may function during the day, and in various types of weather conditions. The major danger to any surface vessel is getting the various cables wrapped in its screws. Small craft also are subject to the risk of collision with the hydrofoil platform.

(Repetition NTM 1(37)02)

(U.S. NAVY)

(38) UNITED STATES-EXPLOSIVE ORDNANCE-WARNING-GENERAL.

The continental shelf of the United States contains many forms of unexploded ordnance (military weapons), and while some ordnance hazard areas are designated, many unexploded ordnance locations are not known. The types most likely to be encountered are underwater ordnance (weapons) such as torpedoes, mines, depth charges, and aerial bombs, but other ordnance items may be found. In general, any metallic object having fins, vanes, propellers, horns, or possibly plates screwed or bolted to an external surface should be regarded as dangerous. This warning is published for all shipmasters, trawlers, fishermen, divers or persons conducting operations on or near the ocean bottom, and provides instructions on the action to be taken when ordnance items or suspicious objects are encountered:

- (1) **OBJECTS SNAGGED OR NETTED:** Any object which cannot be immediately identified as a non-explosive (inert) item **MUST BE TREATED AS AN EXPLOSIVE ITEM**. If in any doubt about its identity, **TREAT IT AS EXPLOSIVE**. Non-explosive naval ordnance items such as practice torpedoes and practice mines will normally be painted bright orange, for ready identification. Any object which is not painted orange may be dangerous and possibly can explode if brought on board or bumped in any way. If an object is brought to the surface of the water and it cannot be immediately identified as an inert item, **DO NOT ATTEMPT TO BRING IT ON BOARD OR ALONGSIDE**. If possible, release the object immediately and radio the nearest Navy or Coast Guard activity giving position and description of the object. If the object cannot be released, or freed by cutting net or line, the following actions are advised:

- (a) stream object as far aft as possible;
- (b) notify nearest Navy or Coast Guard activity and stand by for instructions or help;
- (c) position crew at forward end of vessel, keeping deckhouse between them and the object astern; exposed personnel should remain under cover if possible;
- (d) maintain steerageway as necessary to stay in the area until help or instructions arrive.

If unable to stand by while waiting for instructions because of deteriorating weather or sea conditions or other uncontrollable factors, keep the Navy or Coast Guard activity informed of your vessel's position **AND AVOID POPULATED AREAS, OTHER VESSELS, OR SHORE- OR SEA-BASED STRUCTURES**.

- (2) **OBJECTS BROUGHT ON BOARD:** If a suspected explosive object is not detected until trawl or net contents have been discharged on board the vessel, take the following actions:

- (a) avoid any bump or shock to the object;
- (b) secure it in place against movement;
- (c) keep it covered up and wet down;
- (d) radio nearest Navy or Coast Guard activity and standby for instructions.

If unable to stand by while waiting for instructions because of deteriorating weather or sea conditions or other uncontrollable factors, keep the Navy or Coast Guard activity informed of your vessel's position **AND AVOID POPULATED AREAS, OTHER VESSELS, OR SHORE-OR SEA-BASED STRUCTURES**.

- (3) **FLOATING OBJECTS:** If a floating object cannot be readily identified as non-explosive, **IT MUST BE CONSIDERED TO BE EXPLOSIVE. DO NOT APPROACH, OR ATTEMPT TO RECOVER OR BRING ON BOARD**. Report location immediately to the nearest Navy or Coast Guard activity and warn all other ships or craft in the vicinity. Try to keep the object in sight until instructions are received.

- (4) **NAVAL MINES:** Naval mines constitute a risk to shipping, fishing, underwater exploration, and other maritime interests. The different types of mines, the conditions under which they are most likely to be sighted, and the recommended action are as follows:

FLOATING MINES- Consider all floating mines to be live and dangerous. **DO NOT TOUCH OR APPROACH**. The possibility of drifting mines being camouflaged with seaweed or other innocent appearing floating objects should be borne in mind and avoiding action taken. The following procedures and precautions are recommended:

GROUND MINES- ON THE HIGH SEAS. Report the location of the mine by the most rapid means as soon as circumstances permit, this report is to be similar to that required for any hazard to navigation (See para 5). Mines sighted in anchorage areas or other patrolled water should, if circumstances permit, be kept under observation and reported to the nearest Navy or Coast Guard activity (See para 5). The recovery or handling of the mine should be done only by qualified explosive ordnance disposal personnel. If a mine is drifting down on a vessel at anchor and it cannot be avoided by other means, it is recommended that a stream of water from a fire hose be played near the mine to force it away from the vessel. **WARNING:** Mines may explode if a stream of water is played near them. Exposed personnel should remain under cover until danger is past.

(38) UNITED STATES-EXPLOSIVE ORDNANCE-WARNING-GENERAL. (Continued).

MOORED MINES- Moored mines may sometimes be seen several feet under the surface if the water is clear, or the mine may be floating on the surface. Often several mines or even a long row of the mines can be seen. Usually the sighting of one or more such mines indicates the presence of a minefield. Approaching the general vicinity of such mines is dangerous and should not ordinarily be undertaken by vessels. When mines are sighted, the location of the mines should be determined as accurately as possible, the area should be buoyed if this is feasible, all ships in the vicinity should be warned, and the appropriate Navy or Coast Guard activity should be notified immediately. Ground mines are normally laid in water so deep that they will not be seen unless the water is very clear. However, in very clear water with a hard white sand bottom, even a camouflaged mine can often be located because of the long, regular shadow it casts. The sighting of such a mine may indicate a minefield in the neighborhood. Approaching the general vicinity of such a mine is very dangerous. If a mine is sighted, the location should be determined as accurately as possible and buoyed, all ships in the vicinity should be warned, and the appropriate Navy or Coast Guard activity should be notified immediately.

BEACHED MINES- Any of the above types of mine may be found on the beach, either thrown up by the waves or mislaid by aircraft. Any mine found beached or floating close inshore should be reported at once to the nearest Navy, Coast Guard, military, or civil authority, and the mine should be kept under guard until the arrival of responsible authorities. No person except qualified explosive ordnance disposal personnel should be allowed closer than 400 yards.

- (5) **REPORTING OF SUSPICIOUS OBJECTS RESEMBLING MINES:** Ships frequently report objects resembling mines but give insufficient information to properly evaluate the reports. As a result, needless time and expense is incurred only to find that they are not mines but other floating objects. **HOWEVER, VESSELS SHOULD NOT ATTEMPT TO RECOVER OBJECTS RESEMBLING MINES OR PASS CLOSE ABOARD FOR POSITIVE IDENTIFICATION-KEEP WELL CLEAR.** Since mines are a danger to life and property at sea, masters of ships sighting unidentified or suspicious objects are requested to furnish the following information to the nearest Navy or Coast Guard radio station or activity:
- (a) Position of object, and how closely it was approached.
 - (b) Size, shape, condition of painting, and the presence of marine growth.
 - (c) Whether or not horns or rings are attached.
 - (d) Whether or not definite identification possible.

(Repetition NTM 1(38)02)

(U.S. NAVY)

(39) CAUTION-OIL WELL STRUCTURES IN WATERS CONTIGUOUS TO THE U.S. AND ITS TERRITORIES.

Caution should be exercised when navigating in the waters contiguous to the U.S. and its territories particularly in the Gulf of Mexico, Santa Barbara Channel, California, and Cook Inlet, Alaska, in order to avoid collision with oil well structures and their associated mooring piles, anchor and mooring buoys, etc.

In general, oil well structures can be identified at night by the display of one or more quick flashing white or red lights, however, ships can expect to encounter unlighted structures as well. Structures may be equipped with a fog signal consisting of a horn sounding one 2-second blast every 20 seconds. Submerged wells may be marked by lighted or unlighted buoys.

Shipping safety fairways have been established through the concentration of oil wells in the Gulf of Mexico and Santa Barbara Channel. Mariners are encouraged to use these fairways and should avoid anchoring within a safety fairway. Certain areas adjacent to shipping safety fairways have been charted as fairway anchorages.

(Repetition NTM 1(39)02)

(USCG)

(40) CAUTION REGARDING APPROACH OF SINGLE VESSELS TOWARD NAVAL FORMATIONS AND CONVOYS.

A formation of warships or a convoy is more difficult to maneuver than a single ship. Therefore, the attention of masters is called to the danger of all concerned which is caused by a single vessel approaching a formation of warships or convoy so closely as to involve risk of collision, or attempting to pass ahead of, or through such a formation or convoy. All ships are therefore cautioned to employ the customary manners of good seamanship and, where there is ample sea room, adopt early measures to keep out of the way of a formation of warships or convoy. The fact that in the interests of safety a single vessel should keep out of the way of a formation or convoy does not entitle vessels sailing in company to proceed without regard to

(40) CAUTION REGARDING APPROACH OF SINGLE VESSELS TOWARD NAVAL FORMATIONS AND CONVOYS. (Continued).

the movements of the single vessel. Vessels sailing in formation or convoy should accordingly keep a careful watch on the movements of any single vessel approaching the squadron or convoy and should be ready, in the case the single vessel does not keep out of the way, to take such action as will best aid to avert collision.

(Repetition NTM 1(40)02)

(U.S. NAVY)

(41) NATIONAL IMAGERY AND MAPPING AGENCY DISTRIBUTION SYSTEM.**GENERAL INFORMATION AND CUSTOMER ORDERING GUIDANCE.****DEFENSE SUPPLY CENTER RICHMOND PRODUCT CENTER 9 (DSCR-JN).**

The DSCR Product Center 9 Branch (DSCR-JNB), is available to assist customers during normal duty hours, Monday through Friday, 0630 to 1700 EST. After hours messages are recorded for processing on the next business day. The office can respond to inquiries regarding catalog usage, ordering procedures, product availability, disposition of excess stock, subscriptions and many other GGI&S related activities and interests.

Mailing Address:

Defense Supply Center Richmond
ATTN: DSCR-JNB
8000 Jefferson Davis Highway
Richmond, VA 23297-5335

Message Address:

DSCR RICHMOND VA//DSCR-JNB//
DSN: 695-6500; Fax: 695-6510
Tel: (804) 279-6500; Fax: (804) 279-6510
Toll Free: 1-800-826-0342
E-mail: pc9@dscr.dla.mil
Website: www.dscr.dla.mil/pc9/

After Normal Duty Hours and Crisis Support

Pager-DSCR-JN Duty Officer: Tel. (804) 279-6500
DSN 695-6500

NATIONAL IMAGERY AND MAPPING AGENCY (NIMA) CUSTOMER HELP DESK.

The NIMA Customer Help Desk is available to assist customers with general questions about NIMA products and services. U.S. customers may call from 0600 to 1800 CST, Monday through Friday, toll free at 1-800-455-0899. U.S. and OCONUS customers may call DSN: 490-5032; Tel: (314) 260-5032; DSN: Fax: 490-5024, Tel: Fax: (314) 260-1128; (E-mail: chdesk@nima.mil).

OBTAINING NIMA NAUTICAL CHARTS AND PUBLICATIONS.

DoD customers should refer to the ordering procedures contained in the applicable volume or bulletin of the NIMA Catalog. Requests for NIMA products from non-DoD U.S. Government Agencies are on a reimbursable basis.

(1) CHARTS

As of 1 October 1992, the public sale of NIMA aeronautical and nautical charts and related publications was transferred to the U.S. Department of Transportation, Federal Aviation Administration, National Aeronautical Charting Office (NACO).

Public sale customers may purchase NIMA aeronautical and nautical charts from:

FAA Distribution Division, AVN-530
National Aeronautical Charting Office
6303 Ivy Lane, Suite 400
Greenbelt, MD 20770-1479

(41) NATIONAL IMAGERY AND MAPPING AGENCY DISTRIBUTION SYSTEM. (Continued).

Telephone: 1-800-638-8972 (Within the U.S. only)
Telephone: (301) 436-6829
Fax: (301) 436-0015
E-Mail: 9-AMC-Chartsales@faa.gov
Website: <http://naco.faa.gov>

(2) PUBLICATIONS

As of 1 October 2000, the public sale of all new editions of NIMA nautical publications was transferred to the U.S. Government Printing Office (GPO) for both wholesale and retail purposes. All subsequent wholesale agreements for NIMA nautical publications must be established with the GPO Superintendent of Documents (GPO SuDocs). Publications may be ordered any time through the U.S. Government Online Bookstore at <http://bookstore.gpo.gov> or by Fax at (202) 512-2250, or by telephone Monday through Friday from 7:30 a.m. to 4:30 p.m. ET at (202) 512-1800. Mail orders including payment are sent to:

U.S. Government Printing Office
Superintendent of Documents
P.O. Box 371954
Pittsburgh, PA 15250-1954

(Supersedes NTM 1(41)02)

(NIMA/NOAA)

(42) INTERNATIONAL HYDROGRAPHIC ORGANIZATION (IHO).

The International Hydrographic Organization (IHO) was originally established in 1921 as the International Hydrographic Bureau (IHB), the present name having been adopted in 1970 as a result of a revised international agreement between the member nations. However, the former name, International Hydrographic Bureau, was retained for the IHO's administrative body of three Directors and a small Staff at the Organization's headquarters in Monaco.

The IHO sets forth hydrographic standards as they are agreed upon by the member nations. All Member States are urged and encouraged to follow these standards in their surveys, nautical charts and publications. As these standards are uniformly adopted, the products of the world's hydrographic and oceanographic offices become more uniform. Much has been done in the field of standardization since the Bureau was founded.

The principal work undertaken by the IHO is:

- (a) To bring about a close and permanent association between national hydrographic offices;
- (b) To study matters relating to hydrography and allied sciences and techniques;
- (c) To further the exchange of nautical charts and documents between hydrographic offices of Member Governments;
- (d) To circulate the appropriate documents;
- (e) To tender guidance and advice upon request, in particular to countries needing technical assistance while engaged in setting up or expanding their hydrographic service;
- (f) To encourage coordination of hydrographic surveys with relevant oceanographic activities;
- (g) To extend and facilitate the application of oceanographic knowledge for the benefit of navigators;
- (h) To cooperate with international organizations and scientific institutions which have related objectives.

During the 19th century, many maritime nations established hydrographic offices to provide means for improving the navigation of naval and merchant marine vessels by providing nautical publications, nautical charts and other navigational services. Non-uniformity of hydrographic procedures, charts and publications was much in evidence. In 1889, an International Marine Conference was held at Washington, D.C., and it was proposed to establish a "permanent international commission." Similar proposals were made at the sessions of the International Congress of Navigation held at St. Petersburg in 1908 and again in 1912.

In 1919 the hydrographers of Great Britain and France cooperated in taking the necessary steps to convene an international conference of hydrographers. London was selected as the most suitable place for this conference and on July 24, 1919, the First International Conference opened, attended by the hydrographers of 24 nations. The object of the conference was clearly stated in the invitation to attend. It read, "To consider the advisability of all maritime nations adopting similar methods in the preparation, construction, and production of their charts and all hydrographic publications; of rendering the results in the most

(42) INTERNATIONAL HYDROGRAPHIC ORGANIZATION (IHO). (Continued).

convenient form to enable them to be readily used; of instituting a prompt system of mutual exchange of hydrographic information between all countries; and of providing an opportunity for consultations and discussions to be carried out on hydrographic subjects generally by the hydrographic experts of the world.” In general, this is still the purpose of the International Hydrographic Organization. As a result of the conference, a permanent organization was formed and statutes for its operations were prepared. The International Hydrographic Bureau, now the International Hydrographic Organization, began its activities in 1921 with 18 nations as members. The Principality of Monaco was selected as the headquarters because of its easy communication with the rest of the world and also because of the generous offer of Prince Albert I of Monaco to provide suitable accommodations for the Bureau in the Principality. The IHO, including the 3 Directors and their staff, is housed in its own headquarters which were built and are maintained by the Government of Monaco.

Officers and enlisted men of naval vessels and masters, mates or navigating personnel of merchant ships, including pleasure craft, are welcome to visit the Bureau’s Office at 7 Avenue President J.F. Kennedy, Monte-Carlo.

The works of the IHO are published in both French and English and distributed through various media. Many of the publications are available to the general public, and a discount of 30 percent is offered to naval or merchant marine officers of any of the member nations. Inquiries as to the availability of the publications should be made directly to the “International Hydrographic Bureau, 7 Avenue President J.F. Kennedy, Monte-Carlo, Monaco.”

In order that the work of the IHO may be reviewed and future plans developed, conferences are held every five years. They are attended by delegates from member nations.

Presently, the following nations are Member States of the International Hydrographic Organization:

Algeria	Germany	Philippines
Argentina	Greece	Poland
Australia	Guatemala	Portugal
Bahrain	Iceland	*Qatar
Bangladesh	India	Republic of Korea
Belgium	Indonesia	*Slovenia
Brazil	Iran	South Africa
*Bulgaria	Italy	Russia
*Burma	Jamaica	Singapore
Canada	Japan	Spain
Chile	*Kuwait	Sri Lanka
China	Malaysia	Suriname
Colombia	*Mauritania	Sweden
Croatia	*Mauritius	Syria
Cuba	*Mexico	Thailand
Cyprus	Monaco	Tonga
Democratic People’s Republic of Korea	Morocco	Trinidad and Tobago
Democratic Republic of the Congo	Mozambique	Tunisia
Denmark	Netherlands	Turkey
Dominican Republic	New Zealand	Ukraine
Ecuador	Nigeria	United Arab Emirates
Egypt	Norway	United Kingdom
Estonia	Oman	United States
Fiji	Pakistan	Uruguay
Finland	Papua New Guinea	Venezuela
France	Peru	Yugoslavia

* Membership of IHO pending

(Supersedes NTM 1(42)02)

(IHO)

(43) INTERNATIONAL DISTRESS SIGNALS.

1. All seamen should be familiar with the international distress signals and procedures, both for recognition purposes and for self-reliance in the event of distress where captain and officers may have been incapacitated.
2. Short range distress signals, limited to range of visibility or audibility are:
 - (a) "SOS" signal made by any audio or visual means.
 - (b) International Code of Signals "NC".
 - (c) Hoisting any square flag with a ball or anything resembling a ball, above or below it.
 - (d) Flames made visible (as a burning oil barrel).
 - (e) A rocket parachute flare or hand held flare showing a red light.
 - (f) Rockets or shells, throwing red stars fired one at a time at short intervals.
 - (g) Orange smoke, as emitted from a distress flare.
 - (h) A gun or other explosive signal fired at intervals of about one minute.
 - (i) A continuous sounding of any fog-signal apparatus.
 - (j) Slowly and repeatedly raising and lowering arms outstretched to each side.
3. Radio distress signals via radiotelephone:
 - (a) For a MF/HF radiotelephone tuned to 2182 kHz, send the radiotelephone alarm signal (if available).
 - (b) Set equipment to the MF distress frequency 2182 kHz (or VHF-FM radiotelephone set to Channel No. 16 (156.800 MHz), and transmit the spoken word "MAYDAY" repeated three times followed by "this is" and then the name of the vessel repeated three times. Do not wait for acknowledgment. Continue by stating the nature of the distress; the kind of assistance desired; the position; and any other information which might facilitate the rescue. Wait a few moments for acknowledgment. Then, if none, repeat the entire distress message until acknowledged. Speak the distress message clearly and unhurried. Non-acknowledgment is not definite indication that the message was not received by someone.
4. For radio distress signals via Inmarsat ship earth station:
 - (a) Select either the telex or telephone mode of operation and place a distress call to the nearest rescue coordination center (RCC) in accordance with the ship-earth station manufacturer's instructions. Note that communications over the satellite terminal may be interrupted during a ship casualty if terminal and antenna are not connected to a source of emergency power.
 - (b) Section 359 (d) of the United States Communications Act provides that: "No charge shall be made by any ship or station in the mobile service of the United States for the transmission of distress messages and replies thereto in connection with situations involving the safety of life and property at sea." The FCC interprets this to apply equally to maritime mobile satellite systems.
5. For radio distress signals via digital selective calling: The distress call should be composed to include ship's position information, the time at which the position was taken, and the nature of distress. If the DSC radio is connected to a navigation receiver, position and time-of-position should already be included. The distress call should be transmitted on VHF Channel 70 (156.525 MHz), 2187.5 kHz, or the HF frequencies 4207.5, 6312, 8414.5, 12577 and 16804.5 kHz. An acknowledgment of the distress call should be received on the DSC frequency. Once an acknowledgment has been received, the radio distress procedures via radiotelephone (above) should be followed on the associated voice channel: VHF Channel 16 (156.800 MHz), 2182, 4125, 6215, 8291, 12290 and 16420 kHz. For DSC distress calls on VHF Channel 70 and 2187.5 kHz, the radio distress procedures via radiotelephone should be followed on the associated voice channel if an acknowledgment is not received after a reasonable time (30 sec to 5 min).
6. Simple to follow instructions for the operation of auto alarms, radiotelephone, DSC and satellite communications equipment should be conspicuously posted in the radio rooms of all ships. Procedures outlined here are purposely brief. Complete information on emergency radio procedures is contained in Chapter 4 of Radio Navigational Aids (Pub. 117). The nearest U.S. Coast Guard rescue coordination center MUST be notified whenever an inadvertent distress alert is transmitted.

(Supersedes NTM 1(43)02)

(IMO/USCG)

(44) WORLDWIDE NAVIGATIONAL WARNING SERVICE (WWNWS).

The Worldwide Navigational Warning Service (WWNWS) was established in 1977 through the joint efforts of the International Hydrographic Organization (IHO) and the International Maritime Organization (IMO). The WWNWS is a coordinated global service for the promulgation by radio of information on hazards to navigation which might endanger international shipping.

The basic objective of the WWNWS is the timely promulgation by radio of information of concern to the ocean-going navigator. Such information includes the following: failure and/or changes to major navigational aids, newly discovered wrecks or natural hazards including icebergs in or near main shipping lanes, hazardous military operations and areas where search and rescue, anti-pollution operations and cable-laying or other underwater activities are taking place.

Because of the wide ocean coverage of the WWNWS broadcasts, consideration is also being given to its selective use to augment other services for promulgating information concerning overdue and missing ships and aircraft.

For purposes of the WWNWS, the world has been divided into 16 Navigation Warning Areas (NAVAREAS) (see graphic page, I-1.37). Within each NAVAREA one national authority, designated the Area Coordinator, has assumed responsibility for the coordination and promulgation of warnings. Designated "National Coordinators" of other coastal states in a NAVAREA are responsible for collecting and forwarding information to the Area Coordinator. In the Baltic, a Sub-Area Coordinator has been established to filter information prior to passing to the Area Coordinator.

Coordinators are responsible for the exchange of information as appropriate with other coordinators, including that which should be further promulgated by charting authorities in Notice to Mariners.

The language used is English, although warnings may also be transmitted in one or more of the official languages of the United Nations.

Broadcast schedules appear in an Annex to the International Telecommunication Union "List of Radio-determination and Special Service Stations", Volume II, and in the lists of radio signals published by various hydrographic authorities (in the U.S., Pub. 117). Transmissions usually occur frequently enough during the day to fall within at least one normal radio watch period, and the information is repeated with varying frequency as time passes until either the danger has passed or the information on it has appeared as a Notice to Mariners. Transmission of information over the WWNWS will continue to be affected by the advent of services such as NAVTEX.

A document giving guidance and information on the WWNWS is available free from the International Hydrographic Bureau, 7 Avenue President J.F. Kennedy, B.P. 445 Monte Carlo, Monaco.

The comments and recommendations of mariners are earnestly desired to allow improvements to be made both to individual NAVAREA broadcasts and to the overall system. To facilitate such comments, a post card (individual broadcast) report form and a single page (multiple broadcast) report form have been prepared and are available from the IHB. The reporting forms are preaddressed to the Chairman of the IHO Commission which oversees the WWNWS, but may be forwarded to a specific Area Coordinator at the mariner's option. The report forms request, in addition to general comments, information on the date, ship's position, station (with call sign) monitored, and the broadcast's scheduled frequency, language used, adherence to broadcast schedule (frequency and time) and quality of signal (strength, readability). Cooperation of the mariner in reporting such information is urged.

(44) WORLDWIDE NAVIGATIONAL WARNING SERVICE. (WWNWS). (Continued).

NAVAREA I (United Kingdom)
 United Kingdom Hydrographic Office
 Admiralty Way
 Taunton, Somerset
 TA1 2DN, United Kingdom
 Phone: 44 1823 723315, Fax: 44 1823 322352
 Telex: 46464 HYDRNW G
 E-mail: rnwuser@ukhorn.u-net.com
 Website: www.hydro.gov.uk

Baltic Sea Sub-Area NAVAREA I (Sweden)
 Swedish Maritime Administration
 BALTICO
 S-601 78 Norrköping, Sweden
 Phone: 46 11 19 10 45
 Fax: 46 11 23 89 45 (07-15 UTC)
 46 8 601 79659 (15-07 UTC)
 Telex: 64320 BALTICO S (07-15 UTC)
 16060 STORDO S (15-07 UTC)
 E-mail: ntm.baltico@sjofartsverket.se
 Website: www.sjofartsverket.se

NAVAREA II (France)
 Monsieur le Directeur
 EPSHOM
 13 Rue du Chatellier
 BP 30316
 29603 BREST CEDEX, France
 Phone: 33 2 98 22 16 67, Fax: 33 2 98 22 14 32
 E-mail: coord.navarea2@shom.fr
 Website: www.shom.fr

NAVAREA III (Spain)
 Instituto Hidrografico de la Marina
 Plaza De San Severiano, 3
 11007 Cadiz, Spain
 Phone: 34 956 59 94 09, Fax: 34 956 59 93 96
 Telex: 76102 MARIH E/76147 MEDCO E
 E-mail: ihmesp@redestb.es

NAVAREAS IV AND XII (United States)
 National Imagery and Mapping Agency
 Attn: PTNM (Mail Stop D-44)
 4600 Sangamore Road
 Bethesda, MD 20816-5003
 USA
 Phone: 301 227 3147, Fax: 301 227 3731
 Telex: 898334 NIMA USA
 E-mail: navsafety@nima.mil
 Website: www.pollux.nss.nima.mil

NAVAREA V (Brazil)
 Diretoria de Hidrografia e Navegacao
 Rua Barao de Jaceguay S/Nº
 Ponta da Armacao
 CEP 24048-900 Niteroi-RJ Brazil
 Phone: 55 21 613 8003/8001, Fax: 55 21 613 8063
 Telex: 2134043 MMAR BR
 E-mail: 01@dhm.mar.mil.br
 07@dhm.mar.mil.br
 Website: www.dhm.mar.mil.br

NAVAREA VI (Argentina)
 Servicio de Hidrografia Naval
 Avenida Montes de Oca 2124
 C1270ABV Buenos Aires
 Argentina
 Phone: 54 11 4301 0061/67
 Fax: 54 11 4301 2249
 E-mail: snautica@hidro.gov.ar
 Website: www.hidro.gov.ar

NAVAREA VII (Republic of South Africa)
 Hydrographic Office
 Private Bag X1, Tokai
 7966 Cape Town
 Republic of South Africa
 Phone: 27 21 787 2445
 Fax: 27 21 787 2233 (working hours)
 27 21 787 2228 (after hours)
 E-mail: hydrosan@iafrica.co.za
 Website: hydro.imt.za/hydronet/Ho/

NAVAREA VIII (India)
 National Hydrographic Office of India
 Post Box No. 75
 Dehradun India 248001
 Phone: 91 135 747365
 Fax: 91 135 748373
 Telex: 585220 HYDR IN
 E-mail: nho@sancharnet.in
 Website: www.hydroindia.org

NAVAREA IX (Pakistan)
 Hydrographer of the Pakistan Navy
 Hydrographic Department
 Naval Headquarters
 11, Liaquat Barracks
 Karachi, Pakistan 75530
 Phone: 92 021 48506151/48506152/
 Fax: 92 021 48506360/9203246/9203258
 Telex: 20774 HDRO PK/54019 NAV PK
 E-mail: hydro.pk@bol.edu.pk
 Website: www.paknavy.gov.pk/hydro

(44) WORLDWIDE NAVIGATIONAL WARNING SERVICE. (WWNWS). (Continued).

NAVAREA X (Australia)
 RCC Australia
 AusSAR, Australian Maritime Safety Authority
 GPO Box 2181
 Canberra ACT 2601 Australia
 Phone: 61 2 6230 6811
 Fax: 61 2 6230 6868
 Telex: 62349 MRCCAUS AA
 E-mail: rccaus@amsa.gov.au
 Website: www.amsa.gov.au

NAVAREA XIV (New Zealand)
 Manager, Navigational Safety
 Hydrographic Business Unit,
 Royal New Zealand Navy
 Private Bag 32-901, Devonport
 Auckland 9, New Zealand
 Phone: 64 9 445 5709
 Fax: 64 9 445 5589
 E-mail: iain.lamont@nzdf.mil.nz
 Website: www.hydro.linz.govt.nz

NAVAREA XI (Japan)
 Notices to Mariners Division
 Hydrographic and Oceanographic Department
 Japan Coast Guard
 5-3-1, Tsukiji
 Chuo-ku, Tokyo 104-0045 Japan
 Phone: 81 3 3541 3726/3727 (working hours)
 81 3 3541 3817 (after hours)
 Fax: 81 3 3542 7174
 Telex: 2522222 JAHYD J
 E-mail: tuho@jodc.go.jp
 Website: www1.kaiho.mlit.go.jp/jhd-E.html

NAVAREA XV (Chile)
 Director del Servicio Hidrografico y Oceanografico
 Armada de Chile
 Casilla 324, Valparaiso, Chile
 Phone: 56 32 266666
 Fax: 56 32 266542/266706
 Telex: 230362 HIDRO CL
 E-mail: shoa@shoa.cl
 Website: www.shoa.cl

NAVAREA XIII (Russian Federation)
 Department of Navigation and Oceanography
 8,11 Liniya, B-34
 St. Petersburg 199034, Russia
 Phone: 7 812 213 81 09
 Fax: 7 812 323 75 48
 Telex: 121531 NAVIO RU
 E-mail: gunio@homepage.ru

NAVAREA XVI (Peru)
 Direccion de Hidrografia y Navegacion de la Marina
 Avenida Gamarra No. 500
 Chucuito, Callao 1, Lima - Peru
 Phone: 51 14 658312/296019/299063
 Fax: 51 14 652995
 Telex: 26024 PE HIDRONAV
 E-mail: dihidronav@dhn.mil.pe
 Website: www.dhn.mil.pe/

Chairman, IHO Commission on Promulgation
 of Radio Navigational Warnings
 7 Avenue President J.F. Kennedy
 B.P. 445 MC 98011-Monaco CEDEX
 Principality of Monaco

(Supersedes NTM 1(44)02)

(IMO/NIMA)

NM 1/03

(45) WEATHER OBSERVATION REPORTS.

All ships are encouraged to participate in the international Voluntary Observing Ship (VOS) program. For information, and to arrange assistance from a U.S. National Weather Service Port Meteorological Officer (PMO) contact:

Voluntary Observing Ship Program
National Data Buoy Center, NWS/NOAA
Building 1100, Room 353A
Stennis Space Center, MS 39529-6000
Telephone: (228) 688-1457, (228) 688-1768
Fax: (228) 688-3153
E-mail: robert.luke@noaa.gov or david.mcshane@noaa.gov

Details on the coding and transmission of weather observations may be found in "Observing Handbook No. 1" provided to ships participating in the U.S. VOS program. The U.S. VOS program also makes available a PC software program known as AMVER/SEAS which greatly assists in coding and transmitting VOS observations and AMVER position reports.

Detailed information on the dissemination of National Weather Service marine products including radiofax, such as frequency and scheduling information may be found in NIMA Publication 117, the British Admiralty List of Radio Signals Volume 3(2), and at <http://www.nws.noaa.gov/om/marine/home.htm> (includes links to products).

GENERAL INSTRUCTION FOR REPORTING WEATHER OBSERVATIONS

CODED WEATHER MESSAGES: All weather report messages by radio or Inmarsat will be coded in World Meteorological Organization (WMO) ship synoptic code FM13-IX.

STANDARD SYNOPTIC OBSERVATION TIMES: The regular synoptic hours for reporting are 0000, 0600, 1200, and 1800 UTC. However, watch schedules and other ship functions sometimes make it impractical to meet the synoptic weather reporting schedule. Weather observations may also be submitted at the intermediate hours of 03, 09, 15, and 21 UTC. These should be reported as soon as possible, but no later than 3 hours after the synoptic observation time.

TIMELINESS AND REPORT VALUE: All weather reports should be transmitted as soon as possible to the National Weather Service. Weather reports can be ingested by computer forecast models for only for a limited time after the reporting hour. Major computer programs are run at all synoptic hours and a few programs are run every 3 hours. Forecasters look at, and use, all timely reports in making their forecasts and warnings.

SPECIAL WEATHER OBSERVATIONS

TROPICAL STORMS/HURRICANES: Hurricane season has been designated May 15 through November 30 because of the number of tropical storms and hurricanes during the period. Many special programs are in operation during this season and it is requested that the observation schedule, when in the vicinity of a tropical storm or hurricane, be set to transmit weather reports at least every 3 hours (00, 03, 06, 09, etc.). Hourly reports when within a storm (winds over 48 knots) would be very helpful, if ship routine permits.

SPECIAL REQUESTS FOR OBSERVATIONS: The U.S. National Weather Service may request ships located in areas of suspected storm development to take special observations at more frequent intervals than the routine 6-hourly synoptic observation times. If your ship happens to be in such an area, your report will be helpful even though conditions may not appear bad enough to warrant a special observation.

OBSERVATIONS DURING STORM CONDITIONS: Whenever TROPICAL STORM, TYPHOON, or HURRICANE conditions are encountered anywhere, "SAFETY OF LIFE AT SEA CONVENTION," Chapter V, requires all ships to take special observations and transmit the report to the closest national meteorological service via the most convenient radio or Inmarsat station. In addition to this requirement, it is highly desirable that weather reports be transmitted hourly, if possible; but in any case, not less frequently than every 3 hours.

EXTRATROPICAL STORMS: Submit a weather report message as soon as the average wind equals or exceeds 48 knots. Report at least every 3 hours when under STORM conditions.

(45) WEATHER OBSERVATION REPORTS. (Continued).

COASTAL REPORTS: The weather starts changing as soon as the air moves from land out over the water. Ship weather reporting should continue as close to the coast as ship routine permits. When within 200 miles of the U.S. and Canadian coastlines, reports are requested every 3 hours.

TRANSMISSION OF WEATHER REPORTS

Below is a summary of the primary means by which VOS observations are transmitted to the National Weather Service. Details on these and other available transmission services may be found in "Observing Handbook No. 1."

SITOR OR SINGLE SIDEBAND WEATHER REPORTS THROUGH THE U.S. COAST GUARD: As the usual call up includes "I have weather for you" type of information, no address (i.e., OBS METEO WASHDC) is necessary. The U.S. Coast Guard automatically transmits weather reports only to the National Weather Service. When acknowledged, start the message with the group BBXX followed by the ship's call sign and proceed with the numbers of the report. Some U.S. Coast Guard radio stations will accept weather reports by voice over single sideband radio. The procedures are the same as above. Phonetically pronounce the group BBXX, the ship's call sign, and then proceed with the numbers of the report.

INMARSAT WEATHER REPORTS (STANDARD A):

1. Select U.S. Coast Earth Station Identification, Code 01.
2. Select routine priority.
3. Select duplex telex channel.
4. Initiate the call.

Upon receipt of GA+ (Go Ahead)

5. Select dial code for meteorological reports, 41, followed by the end of selection signal, +. Example: 41+.
6. Upon receipt of our answerback, NWS OBS MHTS, transmit the group BBXX, the ship's call sign, and then the weather message only. Do not send any other preamble. Example:

GA+

41+

NWS OBS MHTS

BBXX WLXX 29003 99131 70808 41998 60909 10250 2021/40110 52003 71611 85264 22234 00261

20201 31100 40803.....

7. Send 5 periods to indicate the end of the message.
8. Try to limit Inmarsat call time to 30 seconds to reduce costs incurred by the NWS.

(STANDARD C):

1. To establish special access code 41, see manufacturer's recommended instructions for set-up. Your local Port Meteorological Officer will also be able to assist you.
2. Do not request confirmation for these messages as this incurs additional expense for the National Weather Service.

WEATHER REPORTS THROUGH SPECIFIED U.S. COMMERCIAL RADIO STATIONS: If the U.S. Coast Guard cannot be contacted and ship is not Inmarsat equipped, as a backup, U.S. commercial radio stations specified in the publication "Observing Handbook No. 1" may be contacted to relay weather messages.

(Supersedes NTM 1(45)02)

(NOAA/NWS)

(46) RADAR BEACONS (RACONS).

Radar beacons (RACONS) are radar responder devices designed to produce a distinctive image on the screens of ship's radar sets, thus enabling the mariner to determine his position with greater certainty than would be possible using a normal radar display alone.

The U.S. Coast Guard operates approximately 80 radar beacons (RACONS) as maritime navigational aids in the Great Lakes, off the Atlantic, Pacific, and Gulf coasts, and on the North Slope of Alaska. RACONS are used to mark and identify points on shore; channel separation, LNB, and other buoys; channel entrances under bridges; and uncharted hazards to navigation (the Morse letter "D", dash-dot-dot, has been reserved for this purpose). RACON marks displayed on a radar screen are Morse characters typically of length 1 to 2 miles, always start with a dash, and always extend radially outward from the radar target marked by the beacon. RACON locations and identifications are included on most marine navigation charts.

(46) RADAR BEACONS (RACONS). (Continued.)

RACONS should be visible to most commercial shipboard radar systems on vessels 6-20 miles from the RACON installation, regardless of radar size. No additional receiving equipment is required. Some precautions are necessary, however, if use of RACONS is desired. Radars that operate in the 10 cm band (2900-3100 MHz) are usually installed as a second radar on larger vessels, and may not respond to RACONS. The Coast Guard now installs dual band (3 cm and 10 cm) RACONS in most locations. In addition, rain clutter control switches on radars must be switched off or, if necessary, on low to ensure that the RACON is visible. Finally, most RACONS operating in the U.S. are frequency agile RACONS. Pulse correlation circuitry (interference or clutter rejection on some radars) installed on most newer radars, if on, may prevent the radar from displaying some RACONS. This circuitry should be switched off.

(Repetition NTM 1(46)02)

(USCG)

(47) NAVTEX.

NAVTEX is an international automated medium frequency (518 kHz) direct-printing service for promulgation of navigational and meteorological warnings and forecasts, as well as urgent marine safety information to ships. It was developed to provide a low-cost, simple, and automated means of receiving this information aboard ships at sea within approximately 200 nautical miles of shore. NAVTEX receivers screen incoming messages, rejecting those which had been previously received or are of a category of no interest to the user. Mariners who do not have NAVTEX receivers but have SITOR radio equipment can also receive these broadcasts by operating it in the FEC mode and tuning to 518 kHz. Internationally, NAVTEX is also broadcast on the alternate NAVTEX frequencies of 490 and 4209.5 kHz.

The Coast Guard broadcasts NAVTEX messages from:

BOSTON, MA (NMF):	Identification (B ₁): F Schedule (UTC): 0045, 0445, 0845, 1245, 1645, 2045
CHESAPEAKE (PORTSMOUTH), VA (NMN):	Identification (B ₁): N Schedule (UTC): 0130, 0530, 0930, 1330, 1730, 2130
SAVANNAH, GA: (NMN)	Identification (B ₁): E Schedule (UTC): 0040, 0440, 0840, 1240, 1640, 2040
MIAMI, FL (NMA):	Identification (B ₁): A Schedule (UTC): 0000, 0400, 0800, 1200, 1600, 2000
ISABELLA (SAN JUAN), PR (NMR):	Identification (B ₁): R Schedule (UTC): 0200, 0600, 1000, 1400, 1800, 2200
NEW ORLEANS, LA (NMG):	Identification (B ₁): G Schedule (UTC): 0300, 0700, 1100, 1500, 1900, 2300
KODIAK, AK (NOJ):	Identification (B ₁): J Schedule (UTC): 0300, 0700, 1100, 1500, 1900, 2300
ASTORIA, OR (NMC):	Identification (B ₁): W Schedule (UTC): 0130, 0530, 0930, 1330, 1730, 2130
POINT REYES (SAN FRANCISCO), CA (NMC):	Identification (B ₁): C Schedule (UTC): 0000, 0400, 0800, 1200, 1600, 2000
CAMBRIA, CA (NMC):	Identification (B ₁): Q Schedule (UTC): 0045, 0445, 0845, 1245, 1645, 2045
HONOLULU, HI (NMO):	Identification (B ₁): O Schedule (UTC): 0040, 0440, 0840, 1240, 1640, 2040

(47) NAVTEX. (Continued).

GUAM (NRV):

Identification (B₁): V

Schedule (UTC): 0100, 0500, 0900, 1300, 1700, 2100

Information broadcast over NAVTEX includes weather forecasts, offshore marine advisory warnings, search and rescue information, and navigational information that applies to waters from the line of demarcation (separating Inland Rules waters from COLREG Rules waters) to 200 NM offshore. Navigational information that affects the safety of navigation of deep draft (15 feet or more) vessels within U.S. Inland Rules waters will also be included.

NAVAREA IV/XII, HYDROLANT/HYDROPAC and ice information over HF SITOR/NBDP (Simplex Telex Over Radio/ Narrow Band Direct Printing) began July 1991 from Coast Guard Stations in Boston, Point Reyes, Honolulu and Guam. Broadcasts are made on 6314 kHz, 8416.5 kHz, 12579 kHz, 16806.5 kHz and 22376 kHz. See NIMA Pub. 117, Radio Navigational Aids, for schedules.

(Supersedes NTM 1(47)02)

(USCG)

(48) SATELLITE DETECTION OF DISTRESS SIGNALS.

The COSPAS-SARSAT System is an international cooperative effort using satellites to detect distress beacons carried by aircraft, vessels, and persons operating in harsh remote environments. A constellation of satellites in low- earth, polar orbits detects and relays distress beacon signals to ground stations. The system delivers distress alerting and position information to the appropriate Rescue Coordination Center.

Extensive coverage is provided over the North American maritime region and other areas for 121.5/243.0 MHz; the 406 MHz system is global in its coverage.

In addition, a network of geostationary satellites is used to complement the polar orbiting constellation. Satellites in orbit over a fixed point on the equator at 22,000 miles continuously monitor the earth within their view, about 40% of the earth's surface. These satellites process 406 MHz beacon signals only. The geostationary satellites support immediate distress alerting for beacons within their field of view. The United States, India and Russia are currently operating participating satellites. Other nations plan to participate in the near future.

EMERGENCY POSITION INDICATING RADIO BEACON (EPIRB).

The Emergency Position Indicating Radio Beacon (EPIRB) is an emergency radio transmitting device used for maritime distress alerting and locating. Table 1 provides an overview of the different classes of EPIRBs currently in existence. Table 2 gives summary comparison of the significant differences between the 406 MHz and 121.5/243.0 MHz beacons. It should be noted that classes A,B,C, and S are gradually being phased out and replaced by Satellite EPIRBS of Cat I and II. For current carriage requirements refer to Navigation and Vessel Inspection Circular No. 9-95; any questions concerning requirements to carry EPIRBs or other safety equipment should be referred to the U.S. Coast Guard (G-MSE-4) Lifesaving and Fire Safety Division, telephone (202) 267-1444.

(48) SATELLITE DETECTION OF DISTRESS SIGNALS. (Continued).**TABLE 1**

CLASS	FREQUENCY	DESCRIPTION	DETECTION
Cat I	406 MHz with 121.5 MHz homing signal	Float free beacon	Polar orbiting and geostationary satellites, high flying aircraft
Cat II	406 MHz with 121.5 MHz homing signal	Manually activated	Polar orbiting and geostationary satellites, high flying aircraft
A	VHF-AM 121.5 & 243.0 MHz	Float free	Polar orbiting satellites and high flying aircraft
B	VHF-AM 121.5 & 243.0 MHz	Manually activated or water-activated battery	Polar orbiting satellites and high flying aircraft
S	VHF-AM 121.5 & 243.0 MHz	Manually activated (same as Class B); required for survival craft (SOLAS)	Polar orbiting satellites and high flying aircraft
Inmarsat-E	1646 MHz	Float free beacon	Satellites

TABLE 2**SUMMARY COMPARISON OF 406 MHz AND 121.5 MHz BEACONS IN THESE CRITICAL AREAS****406 MHz EPIRB****121.5 MHz EPIRB****Coverage:**

Global.

Ground station dependent; ground stations have an effective radius of about 1800 NM. Current coverage: about one-third of the world.

**Reliability-
False Alerts/False Alarms:**

All alerts come from beacons. Satellite beacon transmissions are digital coded signals. Satellites process only coded data, other signals are rejected.

Only about 1 in 4 alerts come from beacons. Satellites cannot discern beacon signals from many non-beacon sources. Beacons transmit anonymously.

About 1 in 10 alerts are actual distress.

Fewer than 1 in 1000 alerts are actual distress.

Individual beacon-unique coding and registration allow rapid incident corroboration. Registration became mandatory 9/13/94. About 90% of 406 MHz beacons are registered. More than 70% of 406 MHz false alarms are resolved by a phone call to registration POCs.

Since 121.5 MHz beacons transmit anonymously, the only way to ascertain the situation is to dispatch resources to investigate—a costly disadvantage.

Alerting

First alert confidence is sufficient to warrant launch of SAR assets. Earlier launches put assets on scene earlier—Average 2 hrs saved in maritime, 6 hrs in inland. These savings are survival-significant.

High false alarm rate makes first-alert launch infeasible. Absent independent distress corroboration, RCCs must wait for additional alert information.

(48) SATELLITE DETECTION OF DISTRESS SIGNALS. (Continued).

406 MHz EPIRB	121.5 MHz EPIRB
Average initial detection/alerting by orbiting satellite is 45 minutes–worst case about 60 minutes.	Same as 406 MHz.
Average time between subsequent satellite passes is about 60 minutes.	Same as 406 MHz.
Vessel/aircraft ID, point of contact information provided with alerts allows rapid corroboration or stand-down.	Alerts are anonymous 121.5 MHz technology not capable of transmitting data.
Allows false alarm follow-up to continuously improve system integrity/reliability.	No capability.
Near instantaneous detection by geostationary satellites. (System in demonstration and evaluation phase with very substantial coverage 70N to 70S.)	No capability.

Position Information:

2–5 km accuracy on average. Position calculated by Doppler shift analysis.	10–20 km accuracy on average. Position calculated by Doppler shift analysis.
Capable of processing beacon-transmitted position information from independent source, e.g.: GPS. Capable beacons and system infrastructure will be available/in place by end of 1997.	No capability.

Locating the Target:

Superior alert position accuracy limits initial position uncertainty to about 40 sq. km.	Initial position uncertainty is about 700 sq. km on average.
121.5 MHz homing signal facilitates target location by radio detection finder-equipped search units.	Same as 406 MHz.

The nearest U.S. Coast Guard rescue coordination center **MUST** be notified whenever an inadvertent EPIRB distress alert is transmitted.

Distress beacon false alarms are a major problem. False alarms delay response, divert scarce response resources from real distress situations, and can quickly overburden the SAR system. Minimize false alarms with proper handling and storage of EPIRBs; understand and comply with manufacturer's operating instructions for your particular EPIRB and tune a radio to 121.5 or 243.0 MHz to monitor the frequency/detect any inadvertent activation. EPIRBs with two-condition, automatic-activation switches (e.g. out of bracket and in water) have demonstrated significantly reduced false alarm rates with no adverse impact on automatic distress performance. The aviation equivalent, the Emergency Locator Transmitter (ELT), has an extremely poor track record in regard to false alarms. While the EPIRB does not have the same engineering problems, the EPIRB user must be aware of how false activations can quickly overburden search and rescue resources.

Inadvertent activations should be reported immediately to the nearest RCC to protect system integrity and prevent costly false alarm response.

EPIRB owners should routinely test their beacons in accordance with manufacturer instructions, and examine them for water tightness and battery expiration date. FCC rules allow class A, B, and S EPIRBs to be turned on briefly (one second only) during the first five minutes of any hour. Signal presence can be detected by an FM radio tuned to 99.5 MHz or an AM radio tuned to any vacant frequency and located close to an EPIRB.

406 MHz beacon registration has been mandatory since 13 September 1994. Satellite emergency position-indicating radio beacon (EPIRB) is intended to save your life, and is also required by Federal Communications Commission regulations.

(48) SATELLITE DETECTION OF DISTRESS SIGNALS. (Continued).

NOAA maintains the U.S. registration data base. When a 406 MHz alert is received, the system automatically checks the data base for an ID match and appends available registration information to the alert message to the responsible RCC. Registration point of contact-provided position information can be used in conjunction with geostationary satellites immediate alerting to allow SAR response 45-90 minutes sooner than otherwise possible—a survival-significant response advantage. In circumstances where the COSPAS-SARSAT system is not able to calculate a distress position, registration data may provide the only link to rescue.

If you purchase a new or a used 406 MHz EPIRB, you MUST register it with NOAA. If you change your boat, your address or your phone number, you MUST re-register your EPIRB with NOAA.

Request 406 MHz EPIRB registration forms from, and mail or fax completed forms to:

NOAA SARSAT
E/SP3, RM 3320, FB-4
5200 Auth Road
Suitland, MD 20746-4304

or call (301) 457-5678 (fax: (301) 568-8649) for further information on registering these EPIRBs. NOAA sends a decal to be affixed to the beacon to confirm registration and as ready evidence of compliance. NOAA contacts all registered beacon owners on a two year schedule to maintain database accuracy. This service is free of charge. Please keep your registration current - IT MAY SAVE YOUR LIFE.

(Supersedes NTM 1(48)02)

(USCG)

(49) HF AND VHF RADIOTELEPHONE AND RADIOTELEX MARINE SAFETY BROADCASTS.

Urgent and routine broadcasts of marine safety information are announced on VHF Channel 16 (156.8 MHz) and made on Channel 22A (157.1 MHz), the ship station transmit frequency portion of Channel 22, of Appendix 18 of the International Telecommunications Union (ITU) Radio Regulations.

The Coast Guard normally broadcasts selected coastal navigational warnings, local major navigational warnings, and local minor navigational warnings on VHF Channel 22A. NAVTEX broadcasts normally include only coastal navigational warnings and weather information. Medium frequency radiotelephone broadcasts can include coastal or selected coastal and local major navigational warnings. These single sideband voice broadcasts are announced on 2182 kHz and are made on 2670 kHz.

Information regarding USA VHF-FM marine safety broadcasts is published in the ITU List of Radiodetermination and Special Service Stations and other internationally-available publications.

Questions and comments concerning VHF marine safety broadcasts should be addressed to the local Coast Guard District staff, or to:

Commandant (G-SCT)
United States Coast Guard
Washington, DC 20593-0001
E-mail: CGCOMMS@COMDT.USCG.MIL

FORMAT OF MARINE INFORMATION BROADCAST/MESSAGES.**1. Urgent Marine Information Message.****a. Radiotelephone:**

(1) 2182 kHz and/or Channel 16 (156.8 MHz). PAN-PAN (3 times)

HELLO ALL STATIONS THIS IS (voice call sign twice)

(brief identifying data) LISTEN (2670 kHz or Channel 22A) OUT

(2) 2670 kHz and/or Channel 22A (157.1 MHz). PAN-PAN (3 times)

HELLO ALL STATIONS THIS IS (voice call sign twice) break (text) break

THIS IS (voice call sign once) OUT

(49) HF AND VHF RADIOTELEPHONE AND RADIOTELEX MARINE SAFETY BROADCASTS. (Continued).

b. Cancellation message:

(1) Radiotelephone. PAN-PAN HELLO ALL STATIONS HELLO ALL STATIONS
HELLO ALL STATIONS THIS IS (voice call sign once, date and time of message
and brief identifying data on canceled urgent traffic) CANCEL PAN-PAN THIS IS
(voice call sign once) OUT

2. Safety Marine Information Message Format.

Radiotelephone:

(1) 2182 kHz and/or Channel 16 (156.8 MHz) SECURITE (3 times)
HELLO ALL STATIONS THIS IS (voice call sign twice)
COAST GUARD MARINE INFORMATION BROADCAST (or)
HURRICANE ADVISORY/STORM WARNING etc. LISTEN
(2670 kHz and/or Channel 22A) OUT

(2) 2670 kHz and/or Channel 22a (157.1 MHz) SECURITE (3 times)
HELLO ALL STATIONS THIS IS (voice call sign once) break (text) break
THIS IS (voice call sign once) OUT

3. Scheduled Broadcast Format.

Radiotelephone:

(1) 2182 kHz and/or Channel 16 (156.8 MHz). HELLO ALL STATIONS
(3 times) THIS IS (voice call sign twice)
COAST GUARD MARINE INFORMATION BROADCAST LISTEN
(2670 kHz and/or Channel 22A) OUT

(2) 2670 kHz and/or Channel 22A (157.1 MHz) HELLO ALL STATIONS
(3 times) THIS IS (voice call sign once) break (text) break THIS IS
(voice call sign once) OUT

a. No preliminary announcement is made for HF broadcasts.

b. When no information is to be transmitted during a scheduled broadcast, the station shall make the following transmission after the call: "NO MARINE INFO BCST THIS SCHEDULE"

4. Abbreviations.

a. In order to reduce the circuit time of Marine Information Broadcasts, readily recognizable abbreviations shall be used by the originator where there is no chance of ambiguity.

b. When broadcasting National Weather Service (NWS) information the exact text as received from the NWS shall be transmitted.

(Supersedes NTM 1(49)02)

(USCG)

(50) MARAD ADVISORIES.

MARAD Advisories rapidly disseminate information on government policy, danger and safety issues pertaining to vessel operations, and other timely maritime matters. MARAD Advisories are periodically issued by the U.S. Maritime Administration (MARAD) to vessel masters, operators and other U.S. maritime interests. The texts of MARAD Advisories are published in weekly Notice to Mariners No. 1, and can be accessed through the National Imagery and Mapping Agency's Maritime Safety Information website (<http://pollux.nss.nima.mil>) and through the MARAD website (<http://marad.dot.gov>).

MARAD ADVISORIES (In force 18 December 2002)**MARAD ADVISORY NO. 00-07 (221500Z NOV 00)**

SUBJECT: YEMEN

TO: ALL OPERATORS OF U.S. FLAG AND EFFECTIVE U.S. CONTROL VESSELS

1. The National Imagery and Mapping Agency (NIMA) requested that the Maritime Administration (MARAD) issue HYDROPAC 1694/00(62) as a MARAD Advisory to ensure wider dissemination to the maritime community. Below is

(50) MARAD ADVISORIES. (Continued).

HYDROPAC 1694/00(62) in its entirety.

2. Due to recent events in Yemen, mariners are advised to use increased caution when approaching or entering Yemeni waters. Special Warning 113 is still in effect. See U.S. Notice to Mariners 45/2000 date November 4, 2000 or the NIMA Marine Navigation website at <http://pollux.nss.nima.mil>.

MARAD ADVISORY NO. 01-01 (131530Z MAR 01)

SUBJECT: MINE DANGER AREA ADVISORY FOR MERCHANT SHIPPING IN THE NORTHERN PERSIAN (ARABIAN) GULF

TO: ALL OPERATORS OF U.S. FLAG, EFFECTIVE U.S. CONTROLLED VESSELS AND OTHER MARITIME INTERESTS

1. The Commander, U.S. Navy Central Command (COMUSNAVCENT), has issued the following Merchant Ship Advisory. This cancels MARAD Advisory 98-1 and provides the results of Mine Danger Area (MDA) clearance off the coast of Kuwait.
2. COMUSNAVCENT Mine Countermeasure ships conducted extensive mine hunting operations in the Arabian Gulf in an attempt to certify known mined areas to be mine free. To date, thorough searches of MDA numbers SEVEN, EIGHT, and NINE as defined in MARAD Advisory 92-2 have been completed with no mines or ambiguous contacts found.
3. The following MDA was specified as an area where mines were known to exist, and although partially searched for mines, remains the area with the highest probability of mines and should be avoided by all shipping:

MDA Number TEN

29-51.50N 048-46.30E
29-51.50N 048-48.00E
29-40.30N 048-48.00E
29-37.25N 048-39.60E
29-37.25N 048 32.50E

4. COMUSNAVCENT has determined that appropriate clearance of MDA number SIX has been achieved with the exception of the shallowest portion as follows:

28-32.23N 048-26.60E
28-32.14N 048-32.50E
28-37.00N 048-27.50E
28-37.75N 048-24.25E

5. The remainder of MDA number SIX and MDAs numbers SEVEN, EIGHT AND NINE have been rescinded. NOTE: Because areas previously mined can never be judged completely safe, even after successful demining operations, mariners are cautioned that mines still present a hazard. Vessels needing to anchor within the former MDAs should do so at the direction of local authorities.
6. This cancellation of previous MDAs, transit channel coordinates and mine swept areas does not guarantee the safe passage or the absence of mines, nor does it represent any assumption of liability by the U.S. Government for the safety of commercial traffic. All merchant vessels are free to choose their own navigational tracks and are not restricted by this Advisory or the U.S. Government in the choice.
7. For updates on this Advisory merchant vessels can contact the COMUSNAVCENT Maritime Liaison Office (MARLO) Bahrain via telex 7031 (ASU BN), landline (973) 743-925, or fax (973) 743-930. Vessels should also consult the latest editions of NIMA nautical charts as updated with chart corrections found in the Summary of Corrections, Volume 3 and at the Maritime Safety Information Center homepage at pollux.nss.nima.mil. Corrections specific to the MDAs were published in Notice to Mariners 20/1998 and 45/1999.
8. Note that the positions listed in this Advisory are given using the World Geodetic System (WGS).
9. Vessel operators are requested to forward this Advisory to their vessels in or entering the affected area as soon as possible and to all other vessels by the most effective means.
10. For further information regarding the issuance of this or other MARAD Advisories, contact the Maritime Administration, Office of Ship Operations, Division of Operations Support, Code MAR-613, Room 2123, 400 Seventh Street SW, Washington DC 20590; telephone (202) 366-5735, fax (202) 366-3954.

(50) MARAD ADVISORIES. (Continued).**MARAD ADVISORY NO. 01-05 (142000Z SEP 01)**

SUBJECT: THE PREVENTION AND REPORTING OF HOSTILE INCIDENTS DIRECTED AT MERCHANT SHIPS AS DISCUSSED IN PUB. 117, "RADIO NAVIGATIONAL AIDS"

TO: OPERATORS OF U.S. FLAG AND EFFECTIVE U.S. CONTROLLED VESSELS

1. Hostile actions directed at merchant shipping are a present and growing problem. These hostile actions include piracy, theft and terrorism.
2. Several agencies, nationally and internationally, have been instituted or directed to assist in countering this problem. The first step in controlling the problem is to establish a reliable database of incidents to define the area and degree of the problem. Such a database has been instituted by the National Imagery and Mapping Agency (NIMA) as the Anti-Shipping Activity Message (ASAM) file. This file can be accessed via the internet at NIMA's Safety of Navigation website at <http://pollux.nss.nima.mil>.
3. NIMA has also established Ship Hostile Action Report (SHAR) procedures to disseminate information within the U.S. Government on hostile actions against U.S. merchant ships. The procedures for sending SHAR reports are detailed in NIMA Pub. 117, "Radio Navigational Aids," Edition 2001, on page 4-11.
4. It should be noted that neither the ASAM nor SHAR reports are a distress message. U.S. and effective U.S. controlled (EUSC) vessels under attack or threat of attack may request direct assistance from the U.S. Navy by following the procedures in Part II of Chapter 4 of Pub. 117, Edition 2001.
5. The Maritime Administration urges all vessels to carry NIMA Pub. 117, Radio Navigational Aids, Edition 2001. An incentive for all ship operators to have the new edition of Pub. 117 on board their vessels is the IMO concurrence that Pub. 117 should be accepted for carriage to meet the requirements of SOLAS regulation V/20 in lieu of the "GMDSS Master Plan." (The full text of this announcement is printed in "Notice to Mariners" 11/01, dated 17 March 2001.)
6. All NIMA navigational publications are offered for sale and may be ordered online, by phone or fax, or by mail. Orders can be placed on the encryption-protected U.S. Government online bookstore (<http://bookstore.gpo.gov>), by phone (202-512-1800, 1-866-512-1800, toll free, from 7:30 AM until 4:30 PM Eastern, Monday through Friday), fax (202-512-2250, 24 hours per day), or by regular mail. Send mail orders and payment to:
Superintendent of Documents
P.O. Box 371954
Pittsburgh, PA 15250-1954
7. Cancel MARAD Advisories 98-6 and 01-02.
8. Vessel operators are requested to forward this advisory to their vessels, terminals and security officials as appropriate. Note that this Advisory will subsequently be published in the NIMA weekly "Notice to Mariners" and MARAD worldwide website.
9. For further information regarding this Advisory, contact the Maritime Administration, Office of Ship Operations, Code MAR-613, Room 2123, 400 Seventh Street SW, Washington DC 20590; telephone 202-366-5735; fax 202-366-3954; or internet e-mail: opcentrl@marad.dot.gov.

MARAD ADVISORY NO. 01-07 (051700Z NOV 01)

SUBJ: MARITIME INDUSTRY REPORTING OF SUSPECTED/ACTUAL TERRORIST INCIDENTS

TO: OPERATORS OF U.S. FLAG AND EFFECTIVE U.S. CONTROLLED VESSELS AND OTHER MARITIME INTERESTS

The following U.S. Coast Guard message was originally sent to all Coast Guard units on 31 Oct. It is being released as a MARAD Advisory in order to ensure the widest distribution possible.

1. "Purpose: This message is to provide the maritime industry with one national telephone number (800-424-8802) to report suspected and actual terrorist incidents.
2. Background: The National Response Center (NRC) is the central point of contact for all oil, chemical, radiological, biological and etiological releases anywhere in the United States. These hazardous substances may potentially be used in a terrorist incident, and given the existing capabilities, the NRC can serve as an effective clearinghouse for notification of terrorism incidents.
3. Discussion: (A) While it may be difficult to predict and prevent a terrorist attack, certain steps can be implemented to minimize the chance that the attack will disrupt vessel/port operations. CG Headquarters is working with industry, field units, and other law enforcement agencies to develop and communicate best practices for prevention. The FBI and USPS have published guidance on their websites that provide "tell-tale" signs for identifying suspicious packages. Further, some cruise ship companies have set up satellite mail processing trailers to minimize the impact of an anthrax threat on both the vessel and terminal operations. (B) Upon notification of a potential terrorist incident the NRC will connect the caller to the

(50) MARAD ADVISORIES. (Continued).

FBI's Strategic Intelligence and Operations Center (SIOC), who will coordinate with other agencies to perform an immediate assessment of the threat credibility. In some instances, the FBI may be able to verify that the report is a false alarm or hoax and requires no response. Other cases may require an on scene assessment by the FBI and other federal, state and local officials. In conjunction with the threat assessment, the NRC will also notify other NRT response agencies under existing protocols.

4. Action: (A) In addition to oil and hazardous substance releases, the NRC should be notified of any suspected terrorist incident, particularly those affecting transportations systems. Units should ensure all reports of suspected or actual incidents are reported to the NRC at 800-424-8802 or 202-267-2675. (B) Recommend that the contents of this ALCOAST be widely distributed to the maritime industry so they know how to report suspected/actual terrorist incidents.
5. Internet release authorized.
6. Released by RADM Pluta, Assistant Commandant for Marine Safety and Environmental Protection, and RADM Cross, Assistant Commandant for Operations."
7. All U.S.-flag operators are requested to forward this advisory to their ships by the most expedient means. This advisory will subsequently be published in the weekly "Notice to Mariners" and MARAD worldwide website.
8. For further information regarding this Advisory, contact the Maritime Administration, Office of Ship Operations, Code MAR-613, Room 2123, 400 Seventh Street SW, Washington DC 20590; telephone 202-366-5735; or fax 202-366-3954.

MARAD ADVISORY NO. 02-02 (131730Z JUN 02)

SUBJECT: VESSEL REPORTING TO NATO SHIPPING CENTER FOR MERCHANT SHIPS TRANSITING THE SUEZ CANAL, UPDATE

TO: OPERATORS OF U.S. FLAG VESSELS AND AND OTHER MARITIME INTERESTS

1. The NATO Shipping Center in Northwood, UK continues to support NATO Naval forces deployed in the Eastern Mediterranean. These forces have established a deterrent naval presence and are conducting surveillance and monitoring operations which has been extended until 01 Jan 03. It is intended that the Shipping Center provide shipping information to the warships while also acting as a point of contact for the merchant marine.
2. The strategic significance of the Suez Canal during a period of tension in the Middle East, together with the campaign against terrorists are the prime reasons for the naval deployment. The surveillance operation and activation of the Center have been discussed with Lloyds of London who have indicated that a deterrent naval presence would have a beneficial stabilizing influence on insurance premiums in the region.
3. In order for the Shipping Center to be effective the cooperation of the merchant marine of NATO and Partner Countries is required. Specifically, details are requested of ships intending to transit the Suez Canal, or which have completed the North bound transit, between Longitude 28° East and Port Said, EG (Longitude 28° East passes through the Isle of Rhodes, GR).
4. In order to give adequate time for the data to be compiled and sent to the NATO warships, the information is required 24 hours in advance. Provision of this information will assist in the compilation of an accurate shipping plot for the surveillance and monitoring of shipping by NATO naval forces in the region. It will also reduce VHF traffic between merchant and naval vessels.
5. The preferred method for merchant vessels to report to the Shipping Center is by e-mail. Alternate means are by fax or telephone.
 E-mail: shippingcentre@eastlant.nato.int
 Website: <http://www.eastlant.nato.int/natosc/index.htm>
 Fax: +44 1923 843575
 Phone: +44 1923 843574
6. In order to further encourage reporting to the Shipping Center, the data requested has been significantly reduced as detailed below. While the reporting of shipping data is on a voluntary basis, Nations are strongly encouraged to support this NATO operation which, by providing a stabilizing naval presence, brings benefits to shipping in the region.

Ship Data:

1. Ship's Name
2. International Call Sign
3. IMO Number
4. General Nature of Cargo

Voyage Data:

5. Southbound Ships
 - (a) ETD and Name of Last Port of Call

(50) MARAD ADVISORIES. (Continued).

- (b) ETA Suez
- 6. Northbound Ships
 - (a) ETD Suez
 - (b) Next Port
- 7. For further information regarding this Advisory, contact the Maritime Administration, Office of Ship Operations, Division of Operations Support, Code MAR-613 Room 2122, 400 Seventh Street SW, Washington, DC 20590; Telephone (202) 366-5735, Fax (202) 366-3954.
- 8. This Advisory cancels MARAD Advisory 01-08 (21 Dec 01).

MARAD ADVISORY NO. 02-05 (262118Z JUL 02)**SUBJECT: MARITIME ALERT AND THREAT DISSEMINATION****TO: OPERATORS OF U.S. FLAG AND EFFECTIVE U.S. CONTROLLED VESSELS AND OTHER MARITIME INTERESTS**

1. The Maritime Administration has received information from the Department of Transportation's Office of Intelligence and Security, regarding increased threat possibilities to American ships operating in or near the waters of Sudan, Yemen, Somalia, Indonesia, and the Strait of Malacca. While there is no known specific threat information, ships are urged to review their security procedures and discuss with local Port Authorities what security measures are in place to protect ships at anchor or pierside from surface threats, threats from land, or underwater threats.
2. U.S. merchant vessels and cruise ships should be on a heightened state of security, should closely monitor the National Imagery and Mapping Agency's (NIMA) broadcast warnings and should review the emergency communication procedures for assistance in NIMA Publication 117.
3. All U.S.-flag ships required by regulation to file Amver position reports and operating in the north Arabian Sea, Gulf of Oman, Persian Gulf, Gulf of Aden, Red Sea and the Suez Canal are reminded to file Amver position reports every 24 hours vice every 48 hours.
4. All U.S.-flag operators with ships in the affected areas are requested to forward this Advisory to their ships by the most expedient means. This Advisory will subsequently be published in the weekly "Notice to Mariners" and MARAD worldwide website.
5. All U.S.-flag operators are advised that they can contact the Maritime Administration for information and assistance regarding vessel operations especially if they have security concerns. For further information regarding this Advisory contact the Maritime Administration, Office of Ship Operations, Code MAR-613, Room 2123, 400 7th Street SW, Washington, DC 20590; Telephone 202-366-5735, or by email to opcentrl@marad.dot.gov.

MARAD ADVISORY NO. 02-07 (102300Z OCT 02)**SUBJECT: THREAT ADVISORY****TO: OPERATORS OF U.S. FLAG AND EFFECTIVE U.S. CONTROLLED VESSELS AND OTHER MARITIME INTERESTS**

1. This provides the latest Advisory from U.S. law enforcement and intelligence agencies addressing the current threat and is provided by the Department of Transportation Office of Intelligence and Security. This Advisory is based upon publicly released information and may be shared within the transportation community.
2. Recent statements, apparently by Al Qaeda leaders, threaten attacks against US economic interests. An audio message from Osama Bin Laden (taped on an undetermined date), broadcast by Al Jazeera on Sunday (6 October), refers to Al Qaeda targeting key sectors of the US economy. Another senior leader (Bin Laden's senior deputy, Ayman Al Zawahir) reiterated the threat in the closing line of an audio taped interview released Tuesday (9 October). This information strengthens previous assessments that Al Qaeda continues to plan major attacks against U.S. interests. The focus upon economic targets is consistent with Al-Qaeda's stated ideological goals and longstanding strategy, to undermine what they see as the backbone of US power, the economy. Striking a prominent U.S. target for economic and symbolic reasons would have immediate worldwide impact.
3. The coordinated release of these statements, coupled with our knowledge of ongoing plotting by Al Qaeda members and threat information described by detainees, strengthens previous assessments that Al Qaeda continues to plan major attacks against US interests. The statements suggest that an attack may have been approved, while the specific timing is left to operatives in the field. Our concerns are heightened by comments from Al Qaeda detainees who are independently interpreting these taped remarks as a sign of attack. In 1998, Al Qaeda issued a fatwa (religious ruling) calling for attacks against Americans worldwide, apparently presaging the August 7, 1998 East Africa Embassy bombings. The content of the statements and the context surrounding these threats reinforces our view that they may signal an attack. One senior detainee maintains that Al Qaeda would only release such a statement after approving a specific plan for an attack. At this

(50) MARAD ADVISORIES. (Continued).

time, we have no information on a specific time, date or location of an attack.

4. Other aspects of the statements reflect what we know of Bin Laden and Al Qaeda strategy. In addition, other recent appeals in extremist circles, some purporting to be from Bin Laden, urge Muslim youth to strike US forces in Kuwait, Jordan, Qatar, and Bahrain. The Al Qaeda organization, which has lost its safe haven in Afghanistan and many of its leaders, is attempting to manipulate the broader Islamic extremist community to attack the United States at home and abroad.
5. The focus on economic targets is consistent with Al Qaeda's stated ideological goals and longstanding strategy. The September 11 attacks and commentary on these attacks by Bin Laden and others indicate how central economic targets are to this strategy: the group's leaders have said that they aim to undermine what they see as the backbone of US power, the economy. Our adversary is trying to portray American influence as based on economic might and therefore seeks to strike an economic target prominent enough for economic and symbolic reasons that it would have immediate resonance around the world.
6. Recipients should review and implement additional prudent steps to detect, disrupt, deter, and defend against potential attacks against our nation's critical transportation infrastructure and installations at home and abroad.
7. Due to the lack of specificity of method, target, and timing, the Homeland Security Advisory System threat level will remain at yellow-elevated, at this time.
8. U.S. DOT reminds the transportation industry to report information concerning suspicious activity to their local FBI office through the FBI website at <http://www.fbi.gov/contact/fo/fo.htm> or to the National Infrastructure Protection Center (NIPC) at its website at <http://www.nipc.gov/incident/cirr.htm>. The maritime industry should contact the National Response Center (NRC) to report suspected and actual terrorist incidents at 800-424-8802 or 202-267-2675.
9. U.S. merchant vessels and cruise ships should be on a heightened state of security, should closely monitor the National Imagery and Mapping Agency's (NIMA) broadcast warnings and should review the emergency communication procedures for assistance in NIMA Publication 117.
10. All U.S.-flag ships required by regulation to file Amver position reports and operating in the north Arabian Sea, Gulf of Oman, Persian Gulf, Gulf of Aden, Red Sea and the Suez Canal are reminded to file Amver position reports every 24 hours vice every 48 hours.
11. All U.S.-flag operators are required to forward this Advisory to their ships by the most expedient means. This Advisory will subsequently be published in the weekly "Notice to Mariners" and MARAD internet website at <http://www.marad.dot.gov/headlines/>.
12. This Advisory cancels and replaces MARAD Advisory 01-06.
13. All U.S.-flag operators are advised that they can contact the Maritime Administration for information and assistance regarding vessel operations especially if they have security concerns. For further information regarding this Advisory contact the Maritime Administration, Office of Ship Operations, Code MAR-613, Room 2123, 400 7th Street SW, Washington, DC 20590; Telephone 202-366-5735, or by email to opcentrl@marad.dot.gov.

(Supersedes NTM 1(50)02)

(U.S. MARITIME ADMINISTRATION)

(51) NAVIGATION RULES, INTERNATIONAL-INLAND.

The latest edition of the Navigation Rules was published in July 1999. This book contains the International Regulations for Preventing Collisions at Sea, commonly called the 72 COLREGS, and the Inland Navigation Rules which supersede the old Inland Rules, Western Rivers Rules, Great Lakes Rules, and other Pilot rules. The book also includes sections on COLREGS demarcation lines, penalty provisions, alternative compliance, and the Vessel Bridge-to-Bridge Radiotelephone Regulations.

PENALTIES: All vessel operators, whether recreational or commercial, are required to understand and follow these Navigation Rules. Violation of the Navigation Rules or negligent operation of a vessel may result in civil penalties up to \$5000.

CARRIAGE REQUIREMENT: The operator of each self-propelled vessel 12 meters or more in length is required to carry on board and maintain for ready reference a copy of the Inland Navigation rules (contained in this publication).

HOW TO ORDER: The Navigation Rules: International-Inland is available from the Government Printing Office for \$14.50. To order by telephone using VISA, MasterCard or Discover Card call (202) 512-1800, ask for the book by name and give GPO stock number 050-012-00407-2, or mail check or money order payable to Superintendent of Documents, to Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

(51) NAVIGATION RULES, INTERNATIONAL-INLAND. (Continued).

CHANGES: Changes are published, as they occur, in the Notice to Mariners and appear in Summary of Corrections (Volume 5). For questions concerning the Navigation Rules please write to:

Commandant (G-MWV)
U.S. Coast Guard
2100 2nd Street S.W.
Washington, D.C. 20593-0001
Telephone: (202) 267-0574.

You may also submit your questions to the USCG website <http://www.uscg.mil/vtm/pages/rules.htm>.
(Supersedes NTM 1(51)02)

(USCG)

(52) IMPROPER USE OF STROBE LIGHTS, SEARCHLIGHTS AND DANGEROUS CARGO LIGHT.

STROBE LIGHTS: The Coast Guard has received reports of the use of white strobe lights as "anticollision" lights and as fishing net markers. A white strobe light is a distress signal in Inland Waters and prohibited under International Rules (except for use as a distress signal on life jackets). Misuse of these lights may result in civil penalties up to \$5000.

SEARCHLIGHTS: Fishing vessels using searchlights while setting and recovering gear, and other vessels using searchlights, are reminded that improper use of searchlights violates both Inland and International Navigation Rules. Examples of violations include: (a) leaving searchlights lit constantly while underway, so as to interfere with visibility of navigation lights and (b) shining at other vessels so as to embarrass them and impair the night vision of other mariners.

DANGEROUS CARGO LIGHT: Warning: foreign vessels operating in the Far East, specifically in the Straits of Malacca, commonly use an all around red light to indicate carriage of a dangerous cargo. In addition, these vessels often use deck security lighting underway to deter piracy; this may obscure the vessel's running lights. U.S. vessels transiting these areas should be aware of these practices and plan accordingly.

NOTE: This notice does not prohibit vessels from using additional lights so long as they cannot be confused with or obscure navigation lights. Mariners are cautioned that all types of high intensity lights, when used at sea, must be properly directed or adequately screened so as to not embarrass another vessel or be misinterpreted. When these lights are not being used for a specific task they should be extinguished.

(Repetition NTM 1(52)02)

(USCG)

(53) GUIDELINES FOR WGS DATUM CONVERSION.

1. The following information is provided to assist navigators in converting geographic positions from World Geodetic System 1972 (WGS 72) to World Geodetic System 1984 (WGS 84) and vice versa.

a. Positions obtained from satellite navigation systems or measured from charts referred to the World Geodetic System 1972 must be moved 0.01 minute eastward and 0.00 minute northward to be placed on the World Geodetic System 1984.

b. Positions obtained from satellite navigation systems (or charts) referred to the World Geodetic System 1984 must be moved 0.01 minutes westward and 0.00 minutes southward to be placed on the World Geodetic System 1972.

2. Individuals who need somewhat more precise values may use the following tables to minimize the error due to the truncation of transformed coordinates.

3. Users with a need for the most accurate transformation from WGS 72 to WGS 84 may use the following transformation equations:

$$\begin{aligned}\text{Latitude Shift} &= (4.5 \cos \varnothing / a \sin 1'') + (f \sin 2 \varnothing / \sin 1'') \\ &= 0.1455 \cos \varnothing + 0.0064 \sin 2 \varnothing \text{ seconds northward}\end{aligned}$$

$$\text{Longitude Shift} = 0.554 \text{ seconds eastward}$$

Where: \varnothing = latitude

f = difference in flattening of the ellipsoids = 0.3121057×10^{-7}

a = semi-major axis of WGS 72 ellipsoid = 6,378,135 meters.

(53) GUIDELINES FOR WGS DATUM CONVERSION. (Continued).

The datum shift from WGS 84 to WGS 72 is computed using the same equation but the direction of the computed shift is reversed—e.g. the latitude shift is southward and the longitude shift is westward.

4. Since the maximum shift only amounts to approximately 17 meters in longitude and 4 meters in latitude on the ground, the shift need not be used to plot positions on charts at scales smaller than 1:50,000.

POSITIONS REFERRED TO WORLD GEODETIC SYSTEM 1972 MUST BE MOVED AS
INDICATED TO BE IN AGREEMENT WITH WORLD GEODETIC SYSTEM 1984

90N	0.0000	MINUTES NORTH AND	0.0092	MINUTES EAST
85N	0.0002	MINUTES NORTH AND	0.0092	MINUTES EAST
80N	0.0005	MINUTES NORTH AND	0.0092	MINUTES EAST
75N	0.0007	MINUTES NORTH AND	0.0092	MINUTES EAST
70N	0.0009	MINUTES NORTH AND	0.0092	MINUTES EAST
65N	0.0011	MINUTES NORTH AND	0.0092	MINUTES EAST
60N	0.0013	MINUTES NORTH AND	0.0092	MINUTES EAST
55N	0.0015	MINUTES NORTH AND	0.0092	MINUTES EAST
50N	0.0017	MINUTES NORTH AND	0.0092	MINUTES EAST
45N	0.0018	MINUTES NORTH AND	0.0092	MINUTES EAST
40N	0.0020	MINUTES NORTH AND	0.0092	MINUTES EAST
35N	0.0021	MINUTES NORTH AND	0.0092	MINUTES EAST
30N	0.0022	MINUTES NORTH AND	0.0092	MINUTES EAST
25N	0.0023	MINUTES NORTH AND	0.0092	MINUTES EAST
20N	0.0024	MINUTES NORTH AND	0.0092	MINUTES EAST
15N	0.0024	MINUTES NORTH AND	0.0092	MINUTES EAST
10N	0.0024	MINUTES NORTH AND	0.0092	MINUTES EAST
5N	0.0024	MINUTES NORTH AND	0.0092	MINUTES EAST
0N	0.0024	MINUTES NORTH AND	0.0092	MINUTES EAST
5S	0.0024	MINUTES NORTH AND	0.0092	MINUTES EAST
10S	0.0024	MINUTES NORTH AND	0.0092	MINUTES EAST
15S	0.0023	MINUTES NORTH AND	0.0092	MINUTES EAST
20S	0.0022	MINUTES NORTH AND	0.0092	MINUTES EAST
25S	0.0021	MINUTES NORTH AND	0.0092	MINUTES EAST
30S	0.0020	MINUTES NORTH AND	0.0092	MINUTES EAST
35S	0.0019	MINUTES NORTH AND	0.0092	MINUTES EAST
40S	0.0018	MINUTES NORTH AND	0.0092	MINUTES EAST
45S	0.0016	MINUTES NORTH AND	0.0092	MINUTES EAST
50S	0.0015	MINUTES NORTH AND	0.0092	MINUTES EAST
55S	0.0013	MINUTES NORTH AND	0.0092	MINUTES EAST
60S	0.0011	MINUTES NORTH AND	0.0092	MINUTES EAST
65S	0.0009	MINUTES NORTH AND	0.0092	MINUTES EAST
70S	0.0008	MINUTES NORTH AND	0.0092	MINUTES EAST
75S	0.0006	MINUTES NORTH AND	0.0092	MINUTES EAST
80S	0.0004	MINUTES NORTH AND	0.0092	MINUTES EAST
90S	0.0000	MINUTES NORTH AND	0.0092	MINUTES EAST

POSITIONS REFERRED TO WORLD GEODETIC SYSTEM 1984 MUST BE MOVED AS
INDICATED TO BE IN AGREEMENT WITH WORLD GEODETIC SYSTEM 1972

90N	0.0000	MINUTES SOUTH AND	0.0092	MINUTES WEST
85N	0.0002	MINUTES SOUTH AND	0.0092	MINUTES WEST
80N	0.0005	MINUTES SOUTH AND	0.0092	MINUTES WEST
75N	0.0007	MINUTES SOUTH AND	0.0092	MINUTES WEST
70N	0.0009	MINUTES SOUTH AND	0.0092	MINUTES WEST
65N	0.0011	MINUTES SOUTH AND	0.0092	MINUTES WEST

(53) GUIDELINES FOR WGS DATUM CONVERSION. (Continued).

60N	0.0013	MINUTES SOUTH AND	0.0092	MINUTES WEST
55N	0.0015	MINUTES SOUTH AND	0.0092	MINUTES WEST
50N	0.0017	MINUTES SOUTH AND	0.0092	MINUTES WEST
45N	0.0018	MINUTES SOUTH AND	0.0092	MINUTES WEST
40N	0.0020	MINUTES SOUTH AND	0.0092	MINUTES WEST
35N	0.0021	MINUTES SOUTH AND	0.0092	MINUTES WEST
30N	0.0022	MINUTES SOUTH AND	0.0092	MINUTES WEST
25N	0.0023	MINUTES SOUTH AND	0.0092	MINUTES WEST
20N	0.0024	MINUTES SOUTH AND	0.0092	MINUTES WEST
15N	0.0024	MINUTES SOUTH AND	0.0092	MINUTES WEST
10N	0.0024	MINUTES SOUTH AND	0.0092	MINUTES WEST
5N	0.0024	MINUTES SOUTH AND	0.0092	MINUTES WEST
0N	0.0024	MINUTES SOUTH AND	0.0092	MINUTES WEST
5S	0.0024	MINUTES SOUTH AND	0.0092	MINUTES WEST
10S	0.0024	MINUTES SOUTH AND	0.0092	MINUTES WEST
15S	0.0023	MINUTES SOUTH AND	0.0092	MINUTES WEST
20S	0.0022	MINUTES SOUTH AND	0.0092	MINUTES WEST
25S	0.0021	MINUTES SOUTH AND	0.0092	MINUTES WEST
30S	0.0020	MINUTES SOUTH AND	0.0092	MINUTES WEST
35S	0.0019	MINUTES SOUTH AND	0.0092	MINUTES WEST
40S	0.0018	MINUTES SOUTH AND	0.0092	MINUTES WEST
45S	0.0016	MINUTES SOUTH AND	0.0092	MINUTES WEST
50S	0.0015	MINUTES SOUTH AND	0.0092	MINUTES WEST
55S	0.0013	MINUTES SOUTH AND	0.0092	MINUTES WEST
60S	0.0011	MINUTES SOUTH AND	0.0092	MINUTES WEST
65S	0.0009	MINUTES SOUTH AND	0.0092	MINUTES WEST
70S	0.0008	MINUTES SOUTH AND	0.0092	MINUTES WEST
75S	0.0006	MINUTES SOUTH AND	0.0092	MINUTES WEST
80S	0.0004	MINUTES SOUTH AND	0.0092	MINUTES WEST
90S	0.0000	MINUTES SOUTH AND	0.0092	MINUTES WEST

(Repetition NTM 1(53)02)

(NIMA)

(54) ANTI-SHIPPING ACTIVITIES MESSAGE.

The Anti-Shipping Activities Message (ASAM) database, a part of the Maritime Safety Information Division website is a National Imagery and Mapping Agency service for mariners providing reports of hostile actions directed against ships. The ASAM database was developed at the request of the U.S. Interagency Working Group on Piracy and Maritime Terrorism. It contains random reports of various forms of aggression against shipping around the world. Events are categorized by date and by geographic area and are based on the NIMA subregion system. The user can submit an ASAM, with the full particulars of an incident to be reported, or search the existing ASAM database by user-defined queries via the Maritime Safety Information Division website (<http://pollux.nss.nima.mil>). Upon receipt of the ASAM at NIMA, the text is reviewed and evaluated for further action, edited, and stored in the ASAM database for access by all customers. The database can be used as a voyage planning tool by providing cautionary information to ship owners and masters concerning security conditions in and near ports and narrow channels around the world. Examples of ASAM Reports in this file include the ACHILLE LAURO incident, robberies of ships transiting the Malacca Straits, attacks on fishing boats and merchants ships coasting off Western Sahara, and certain events occurring in and around the Persian Gulf. When sending a hostile action report the user of ASAM should provide NIMA with as much of the following information as is possible:

1. Date of Occurrence;
2. Geographic Location;
3. Known or Suspected Aggressor;
4. Victim (Ship's) Name;
5. A detailed description of the occurrence being reported.

(54) ANTI-SHIPPING ACTIVITIES MESSAGE. (Continued).

For further information on the ASAM database users may contact (301) 227-3173 or write:

MARITIME SAFETY INFORMATION DIVISION (PTNM)
ST D 44
NATIONAL IMAGERY AND MAPPING AGENCY
4600 SANGAMORE ROAD
BETHESDA, MD 20816-5003

Recent reports have stated there are 700 identifiable terrorist groups who have committed more than 8000 major acts of political violence since 1962. In one recent year there were 450 such actions against ships around the globe. Subregions that cover the crossroads of the world are more active with anti-shipping activities than some remote areas. Note that the ASAM file is only an indicator of hostile actions reported to NIMA and is not a complete listing of all hostile actions that have occurred worldwide. NIMA strongly urges the mariner to assist in the population of the ASAM database by sending reports of hostile actions.

(Repetition NTM 1(54)02)

(NIMA/PTNM)

(55) CAUTION ON ANNOUNCEMENT OF NEW CHARTS AND PUBLICATIONS.

CAUTION: DO NOT USE A NEW CHART OR PUBLICATION UNTIL IT IS ANNOUNCED IN NOTICE TO MARINERS. There may be occasions when a new edition of a chart or publication is received prior to the official announcement of its release being published in Notice to Mariners. Since Notice to Mariners corrections are for specific editions of products, it is imperative that the user neither discard the previous edition nor use the new edition until this official announcement is received. Further, since Notice to Mariners corrections are for specific editions of products, it is critical that the user update only the specifically-referenced product edition. Additionally, users of the NIMA website are advised that announcements of new editions in this system appear approximately two weeks ahead of the printed Notice to Mariners.

(Repetition NTM 1(55)02)

(NIMA/PTNM)

(56) GLOBAL POSITIONING SYSTEM (GPS) AND DIFFERENTIAL GPS (DGPS) INFORMATION.

The Global Positioning System (GPS) is a satellite-based radionavigation system with continuous worldwide coverage. It provides navigation, position, and timing information to air, marine, and land based users. GPS is operated and controlled by the Department of Defense (DoD) under Air Force management. Although originally intended for military use only, federal radionavigation policy has established that the GPS Standard Positioning Service (SPS) will be available for civil use.

GPS Initial Operational Capability (IOC) was established on December 8, 1993. At IOC, the GPS achieved its operational configuration for providing SPS. Full Operational Capability (FOC) to meet operational military functionality was achieved July 17, 1995. Computer programs are available from commercial sources so that interested users can determine the availability and quality of GPS coverage at their particular location.

The U.S. Coast Guard is the Government interface for civil users of GPS. The Coast Guard established the Navigation Information Service (NIS), as a part of the Coast Guard Navigation Center (NAVCEN) located in Alexandria, Virginia, to meet the needs of the civil user. The information provided includes planned, current or recent satellite outages, constellation changes, user instructions and tutorials, system status, information about Coast Guard provided radionavigation systems, and information about federal radionavigation policy and systems.

Whenever possible, advance notice of GPS satellite outages will be provided by the DoD and made available by the U.S. Coast Guard. Any planned disruption of the Standard Positioning Service (SPS) in peacetime will be subject to a minimum 48 hour advance notice provided by the DoD to the Coast Guard Navigation Center's Navigation Information Service (NIS). The NIS advisory services are updated whenever new information is received.

NIS services are described below:

1. Watchstanders are available 24 hours to answer phones (703) 313-5900, email nisws@navcen.uscg.mil and fax (703) 313 5920. The NIS 24 hour voice recording provides access to a 90-second message of the current system status. Forecasted outages, historical outages, and other changes in the GPS are included as time permits. The NIS 24-hour voice recording phone number is (703) 313-5907.

(56) GLOBAL POSITIONING SYSTEM (GPS) AND DIFFERENTIAL GPS (DGPS) INFORMATION. (Continued).

2. The Department of Commerce transmits recorded time information on WWV/WWVH 2.5, 5, 10, 15, and 20 MHz frequencies. During the 40-second interval between time ticks, navigation information is announced by voice. Listen at minute 14 and 15 on WWV and minute 43 and 44 on WWVH for GPS status and current or forecasted outages. Internet access is available from the World Wide Web at <http://www.navcen.uscg.gov>.
3. The NIS disseminates GPS Advisory Broadcast Messages through USCG broadcast stations using VHF-FM voice, HF-SSB voice, and NAVTEX broadcasts. The broadcasts provide the GPS user in the marine environment with the current status of the GPS satellite constellation, as well as any planned/unplanned system outages that could affect GPS navigational accuracy. Information is provided in message format via an established system of message dissemination. NIS provides the GPS Operational Advisory Broadcast information to NIMA for broadcast in NAVAREA, HYDROLANT, or HYDROPAC messages. These messages are generally geared to the deep draft mariner. NIMA also publishes a Weekly Notice to Mariners (NTM) containing USCG Marine Information Broadcasts and NIMA broadcast warnings for a seven-day period.

To comment on any of these services or ask questions about GPS status, contact the NIS at:

Commanding Officer
U.S. Coast Guard NAVCEN
7323 Telegraph Road
Alexandria, VA 22315-3998
NIS Phone: (703) 313-5900
Fax: (703) 313-5920

The Civil GPS Service Interface Committee (CGSIC) was established to address issues and problems that relate to the civil use of GPS. The CGSIC is the official interface between civil GPS users and the GPS operators (DoD). The CGSIC consists of a General Committee, an Executive Panel, and three Subcommittees:

1. Timing Information
2. International Information
3. U.S. States and localities

The CGSIC is chaired by the U.S. Department of Transportation Radionavigation and Positioning Staff. The U.S. Coast Guard Navigation Center (NAVCEN) is the deputy chair and administrator. Points of contact are:

CGSIC Executive Secretariat
Commanding Officer CGSIC
U.S. Coast Guard NAVCEN
7323 Telegraph Road
Alexandria, VA 22315-3998
Phone: (703) 313-5900
Fax: (703) 313-5920
E-mail: rcasswell@navcen.uscg.mil

The program manager for all U.S. Coast Guard civil GPS activities is:

Commandant (G-OPN)
U.S. Coast Guard
2100 2nd St. SW
Washington, DC 20593-0001
Phone: (202) 267-0980
Fax: (202) 267-4222

Additionally, the Coast Guard Navigation Center operates the maritime Differential GPS (DGPS) service. This service is a medium frequency (285 kHz - 325 kHz), all weather, 24-hour a day augmentation to the GPS service that provides localized GPS pseudorange correction factors. DGPS Full Operational Capability (FOC) was achieved March 15, 1999. DGPS provides six second time to alarm integrity for GPS out of tolerance conditions and increased position accuracy. The specified accuracy of DGPS augmented fixes is 10 meters (2drms), though typical results are 1 to 3 meter accuracy. Fifty three (53) maritime sites provide DGPS coastal coverage of the continental US, the Great Lakes, Puerto Rico, the Western rivers, as well as Hawaii and portions of the Alaskan coast.

(56) GLOBAL POSITIONING SYSTEM (GPS) AND DIFFERENTIAL GPS (DGPS) INFORMATION. (Continued).

Information concerning DGPS status, including planned/unplanned system outages, is disseminated through local USCG Broadcast Notice to Mariners, NAVTEX broadcasts, and internet access at <http://www.navcen.uscg.gov>.

A Nationwide DGPS expansion provides terrestrial users an additional 25 NDGPS sites, with the combined services providing single coverage over more than 80% of the continental US.

(Supersedes NTM 1(56)02)

(USCG)

(57) TELEVISION ANTENNAE INTERFERENCE WITH GPS.

It has come to the attention of the U.S. Coast Guard and Federal Communications Commission that certain consumer electronics-grade active VHF/UHF marine television antennas are causing operational degradation in the performance of Global Positioning System (GPS) receivers. This interference may be realized as a display of inaccurate position information or a complete loss of GPS receiver acquisition and tracking ability.

The interference is not limited to the GPS equipment onboard the vessel with the installed active marine television antennae. There have been reports of interference occurring on other vessels and installations operating up to 2000 feet away from vessels using such antennas.

In one particular case, the interference caused the position of the vessel as displayed on the electronic chart to move erratically and dramatically often across large expanses of land. As can be expected, various data displays indicated erroneous information such as excessive speeds. In these instances, the problem would occasionally correct itself while at other times required resetting the system. To the vessel's crew, these annoyances were frustrating and caused concerns that perhaps less obvious inaccuracies were occurring. Ultimately, this affected their confidence in the performance of the GPS and Electronic Chart Display and Information System.

If you are experiencing recurring outages or degradation of your GPS receiver operation, you should perform an on-off test of your TV antenna. If turning off the power to the antenna results in improvement in the GPS receiver performance, the antenna may be the source of interference in the GPS band. In that case, you should contact the manufacturer of the antenna and identify the symptoms.

If the test is not positive and the GPS interference persists, contact the watchstander at the Coast Guard Navigation Information Service at nisws@navcen.uscg.mil or telephone (703) 313-5900.

(Supersedes NTM 1(57)02)

(USGC)

(58) DIGITAL SELECTIVE CALLING DISTRESS ALERT.

Digital selective calling (DSC) is a capability offered with some VHF and HF maritime radios, intended to initiate calls and provide distress alert information to the U.S. Coast Guard and other rescue coordination centers. DSC is a major element of the Global Maritime Distress and Safety System (GMDSS), an International Maritime Organization-mandated telecommunications system required on vessels subject to the provisions of the Safety of Life at Sea Convention (SOLAS). All vessels should interconnect their GPS with their DSC radios to provide an accurate position in the event of sending a distress alert. The interconnection of the DSC radio with the GPS is required for SOLAS vessels and is required by the International Telecommunications Union for non-SOLAS vessels.

Coast Guard Communications Stations operate MF and HF DSC, and can be reached using the Maritime Mobile Service Group Identity (MMSI) 003669999. The United States has not declared GMDSS Sea Areas A1 or A2 effective. Medium frequency installations are ongoing. A contract has been awarded for the installation of VHF FM DSC equipment with completion scheduled for 2006. Until then, the Coast Guard cannot receive a VHF DSC distress alert unless a mariner with a DSC-compatible radio receives an alert and relays it to the Coast Guard. Mariners receiving a VHF distress alert should attempt to contact the vessel sending the distress alert and obtain information concerning the distress, and then contact the Coast Guard to pass on this information. The Coast Guard will treat these alerts as legitimate distress calls. Continue listening on the working channel to ensure communications between the Coast Guard and ship in distress is established. Finally, be ready to provide further assistance if asked by the Coast Guard.

(Supersedes NTM 1(58)02)

(USCG)

(59) VESSEL SQUAT IN SHALLOW WATER.

The following discussion is primarily aimed towards mariners who are navigating ocean-going commercial vessels on approaches to ports, where water depths are beginning to shoal (less than 3 times the ship's draft). The discussion describes the phenomenon of "squat" and is intended to help mariners recognize circumstances where it could significantly affect the navigational draft of their vessels.

In August 1992, a 950-foot passenger liner ran aground in an area where the charted depth of 39 feet was more than 7 feet greater than the vessel's maximum calculated draft. One major contributing factor was that neither the master nor the pilot adequately judged the considerable squatting effect (sinkage & trim) caused by the high-speed transit (24.5 knots) in relatively shallow water (which was about 1.22 times the ship's draft).

DISCUSSION OF SQUAT: The term "squat" describes the combination of sinkage (overall settling of the hull) and trim (the bow up/down rotation of the hull). This phenomenon occurs in waters of any depth, but is particularly affected by the proximity to the sea floor. Therefore, the effects of squat become more pronounced in shallow and/or restricted waters (such as canals or dredged channels). As a ship moves forward, water must quickly flow around and under the hull to fill the void left behind. This accelerated water flow affects the pressure distribution along the hull. Consequently, the vessel squats, effectively increasing its draft and trim. Depending upon the vessel's speed and hull form, the ship may trim by either the bow or the stern. Generally, full-bodied hulls (where $C_b > 0.7$, such as tankers) tend to trim by the bow, whereas fine-bodied hulls (such as container ships) tend to trim by the stern.

SHALLOW WATER EFFECTS: Shallow water affects a ship in two manners: squat (which increases the effective draft at bow and/or stern), and maneuverability (which reduces maneuvering responses compared to open, deep water performance). Also, the faster the vessel's speed, the greater the magnitude of the effects.

CALCULATION OF SQUAT: Squat is a function of the vessel's speed through the water, the ratio of ship draft to water depth, the ratio of cross-sectional areas of the hull and channel, the block coefficient of the hull, and other factors. Formulas for predicting squat for any particular ship are complex and may not be practical for direct use by mariners. However, a useful "rule of thumb" can be used as long as mariners understand its limitations, as discussed below.

In general, shallow water effects can begin to appear when water depth is less than 3 times the vessel's draft, and can become significant by the time water depth is less than 1.5 times the draft. For a ship in unrestricted shallow water (i.e., not within the confines of a dredged channel or canal), a conservative rule-of-thumb for estimating squat is:

$$S = 0.033C_b V^2$$

[where: s = squat (*ft*), V = ship speed, including any head current (*knots*), and C_b = block coefficient of hull]. For example: at 15 knots, the squat for a container ship ($C_b = 0.60$) proceeding against a 1-knot head current would be approximately 5.1 feet and for a tanker ($C_b = 0.85$) would be approximately 7.2 feet.

The estimated squat should be added to the deepest calculated draft of the vessel (bow or stern). This rule-of-thumb conservatively overestimates the squat of a ship and is therefore considered to be safe for operational decisions.

However, the above rule-of-thumb is valid only when the ship's speed is less than:

$$V < 2.52 \times \text{SQRT}(d)$$

[where V = ship speed (*kts*), and $\text{SQRT}(d)$ = square root of the water depth " d " (*ft*)]. For example: in 50 feet of water, the above squat estimate is valid only if the ship's speed is less than 17.8 knots. As the ship moves into shallower water, the limiting speed will decrease. For example, in 30 feet of water, the limiting speed for the rule-of-thumb reduces to 13.8 knots. If the ship's speed is faster than the limiting speed, then the squat prediction is no longer reliable and a greater squat should be assumed. Therefore, if the ship maintains a constant speed as it proceeds into shallower water, it may eventually exceed the limiting speed and experience a significant increase in squat.

If the block coefficient C_b is not known, it may be approximated as follows:

$$C_b = 35\text{Disp}/(\text{LBT})$$

[where Disp = full-load displacement (*long tons*), L = length between perpendiculars (*ft*), B = beam (*ft*), and T = full-load draft (*ft*)]. For example, the block coefficient C_b of a container ship 810'L x 106'B x 36'T with a full-load displacement of 51,710 Ltons is approximately 0.59.

(59) VESSEL SQUAT IN SHALLOW WATER. (Continued).

UNDERKEEL CLEARANCE: When evaluating the underkeel clearance in shallow waters, mariners are advised to also take into account the wave-induced motions of the ship (heave and pitch), the uncertainty within their own draft & trim calculations, as well as a prudent margin for uncertainty in the charted water depths (even modern hydrographic surveys may not locate all sea floor obstructions or the shallowest depths). In particular, sudden changes in water depth (such as passing over a shoal area) can cause transient squat effects that can be more substantial than predicted. Similarly, sudden changes in ship speed (acceleration or deceleration) can also cause transient changes in squat. For broad-beamed ships with a relatively “tender” rolling periods (such as modern, post-Panamax container ships), rolling motions can significantly increase drafts at the bilges, in addition to the effects of squat.

MANEUVERABILITY: In addition to squat, the mariner should also be aware that shallow water may increase turning diameter. Modeling of tankers has shown an increase in turning diameter of 60% to 100% in water less than 1.25 times the ship’s draft. Hydrodynamic effects such as yawing and sheering should also be taken into account in shallow and restricted waters, especially when passing another vessel. Also, the vessel will require substantially more revolutions to maintain the same speed (during sea trials with a 270-foot destroyer drawing 8 feet of water, the ship required 400 rpm to reach 22 knots in 100 feet of water, but nearly 500 rpm to maintain the same speed in 45 feet of water).

RESTRICTED WATERS: When the ship is transiting shallow restricted waters (such as a dredged channel within a shallow bay), the hydrodynamic flow around the hull is confined by the banks of the channel, creating a different pressure distribution and aggravating the squat condition (usually by increasing the stern squat). The squat estimated by the above “rule of thumb” should be doubled. Maneuverability is also further degraded; which is of particular concern when passing (meeting or overtaking) another vessel in the waterway or when maneuvering near banks or in channel curves.

RECOGNIZING SHALLOW WATER EFFECTS: Signs that a ship has entered shallow water conditions can include one or more of the following:

- Vibration increases suddenly,
- Engine loads down and revolutions decrease,
- Wavemaking increases, especially at the bow,
- Ship becomes more stable and slower to respond to controls,
- Echo sounders indicate a change in clearance or depth,
- The shaft horsepower (shp) speed decreases at the same engine revolutions,
- Water flow around the ship changes, and water color darkens (possibly indicating entrained mud).

REGULATIONS: The Code of Federal Regulations (CFR) requires that the person directing the movement of the vessel set the vessel’s speed with consideration for the tendency of the vessel underway to squat and suffer impairment of maneuverability when there is small underkeel clearance [33 CFR 164.11(p)(3)]. In addition, the International Maritime Organization recommends that ships be provided with a bridge poster, a pilot card, and a maneuvering booklet. These should include information on the squat and maneuvering characteristics for that particular vessel [see also USCG Navigation Safety Inspection Circular 7-89].

For more information, contact:

Commandant, U.S. Coast Guard
Naval Architecture Division (G-MSE-2)
2100 Second Street S.W.
Washington, D.C. 20593-2967
Telephone: (202) 267-2988

(Supersedes NTM 1(59)02)

(USCG)

(60) PROMULGATION OF MARITIME SAFETY INFORMATION BY U.S. INFORMATION PROVIDERS.

The purpose of this information is to provide mariners with the details of the promulgation of Maritime Safety Information (MSI) via the Global Maritime Distress and Safety System (GMDSS) by U.S. information providers, namely the National Imagery and Mapping Agency (NIMA), the U.S. Coast Guard (USCG), and the National Weather Service (NWS).

The equipment needed to receive MSI is a GMDSS type-approved Inmarsat-C transceiver for SafetyNET broadcasts via Inmarsat satellites and a NAVTEX receiver for Coastal Warnings. SafetyNET is an international service for the broadcast and automatic reception of MSI by means of direct printing through Inmarsat’s Enhanced Group Call (EGC) system. NAVTEX is

**(60) PROMULGATION OF MARITIME SAFETY INFORMATION BY U.S. INFORMATION PROVIDERS.
(Continued).**

an internationally coordinated system for the automatic reception of MSI via MF 518 kHz. The area of coverage for the United States is NAVAREA/METAREA IV and XII for SafetyNET and for NAVTEX, approximately 200 nautical miles from each NAVTEX station (see graphic, page I-1.61). Additionally, the NWS is providing further coverage for NAVAREA/METAREA XVI (Peru) for weather forecasts and warnings.

The major categories of MSI in the United States for both SafetyNET and NAVTEX are:

- a. navigational warnings (including electronic navigation system messages such as Loran-C and GPS)
- b. meteorological warnings
- c. ice reports
- d. search and rescue information
- e. meteorological forecasts

The following table details the scheduled times for the U.S. information providers and what types of broadcasts are being sent. For a depiction of the Inmarsat satellite footprints overprinted on the worldwide NAVAREA/METAREAS, see the graphic on page I-1.37.

In order to ensure that all relevant SafetyNET MSI is received before sailing, it is recommended that the Inmarsat-C receiver remain in operation while the ship is in port. To receive SafetyNET traffic automatically, the ship's receiver must be set up properly at the start of the voyage:

- a. select the appropriate satellite (AOR-W, AOR-E, POR, IOR)
- b. enter extra NAVAREA/METAREA codes in addition to the one that the vessel is currently in, if desired
- c. key in the ship's position and ensure a periodic update (at least every 12 hours is recommended). This determines the NAVAREA/METAREA that will be monitored. If the position is not updated for more than 12 hours, ONLY geographically addressed messages with priorities greater than routine within the entire ocean region will be printed out.

In order to ensure that all relevant NAVTEX MSI is received before sailing, it is recommended that the NAVTEX receiver remain in operation while the ship is in port. To receive MSI automatically via NAVTEX, the ship's NAVTEX receiver must be programmed with the desired NAVTEX stations and subject identifiers.

It is intended that all NAVTEX weather be broadcast with subject indicator "B," for Meteorological Warnings, which cannot be rejected by the NAVTEX receiver, or "E" for routine forecasts. However, this cannot be fully implemented at the present time within the U.S. Therefore, all mariners in U.S. waters should program their NAVTEX receivers to include subject indicator "E" in order to receive both warnings and routine weather forecasts via NAVTEX.

The repetition rates of SafetyNET and NAVTEX messages vary, depending on the type of broadcast and situation. NAVTEX messages are generally repeated at each scheduled time slot until canceled (usually every four hours). SafetyNET weather forecast messages from the NWS normally are sent once unless an unscheduled warning is being issued, in which case an echo is used. The echo is rebroadcasted six minutes after the initial transmission to give vessels which are transmitting at the time of the initial broadcast another opportunity to receive the message.

NIMA promulgates all of its SafetyNET messages (which do not have a known cancellation within 24 hours of the initial broadcast) once each day until canceled. Those messages canceling others and those with a known expiration within 24 hours are sent only once.

For search and rescue, the USCG determines the repetition of the broadcast depending upon the type of incident, area of the incident, and known potential rescue vessels.

The USCG's International Ice Patrol, which sends SafetyNET messages concerning the status of ice in the Atlantic Ocean, sends its traffic once.

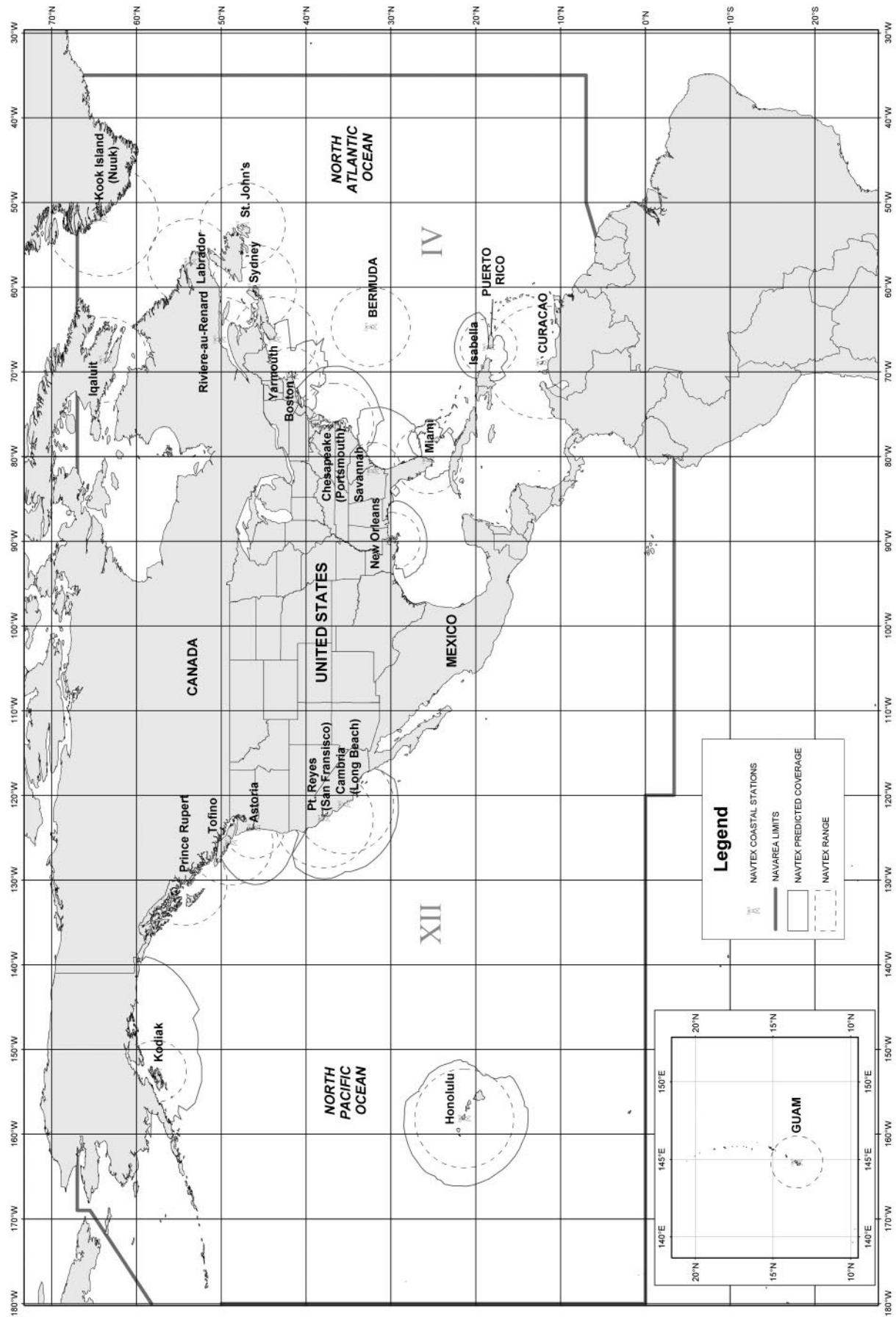
All type-approved Inmarsat SafetyNET and NAVTEX receivers are designed to suppress redundant copies of correctly copied messages. For further discussion of GMDSS and its many aspects, users are encouraged to read the appropriate chapter in *The American Practical Navigator* (Bowditch) and/or in Publication 117, *Radio Navigational Aids*. Pub. 117 also lists in-depth worldwide GMDSS coverage. Other valuable GMDSS reference sources include:

- IMO Newsletters
- NOAA Mariners Weather Log (<http://www.vos.noaa.gov>)
- USCG Amver Bulletins
- USCG Local Notice to Mariners
- British Admiralty List of Radio Signals, Volumes 3 and 5
- Many commercial maritime magazines

(60) PROMULGATION OF MARITIME SAFETY INFORMATION BY U.S. INFORMATION PROVIDERS.
(Continued).

SCHEDULED BROADCAST TIMES

WHAT	WHO	WHEN (UTC)	HOW	NAVAREA/ METAREA	SATELLITE
High seas warnings and forecasts	NWS	0430, 1030, 1630, 2230	SafetyNET	IV	AOR-W
High seas warnings and forecasts	NWS	0545, 1145, 1745, 2345	SafetyNET	XII	AOR-W/POR
High seas warnings and forecasts	NWS	0515, 1115, 1715, 2315	SafetyNET	XVI	AOR-W
Hurricane advisories West Atlantic	NWS	as required	SafetyNET	IV	AOR-W
Hurricane advisories East Pacific	NWS	as required	SafetyNET	XII	POR/AOR-W
Hurricane advisories Central Pacific	NWS	as required	SafetyNET	XII	POR
Long range navigational warnings	NIMA	1000, 2200	SafetyNET	IV	AOR-W
Long range navigational warnings	NIMA	1030, 2230	SafetyNET	XII	POR/AOR-W
Long range search and rescue	USCG	upon receipt	SafetyNET	IV/XII	AOR-W/POR
Coastal MSI	USCG	4 to 6 times daily for routine traffic; upon receipt for distress	NAVTEX	Generally, within 200 miles of the coastline	None; see Pub 117 for stations and times
Status of ice in North Atlantic Ocean	USCG	twice daily 0000, 1200	SafetyNET	IV	AOR-W
(Supersedes NTM 1(60)02)					(USCG/NIMA)



(61) COAST GUARD SAFETY INFORMATION AVAILABLE ON INTERNET.

The United States Coast Guard Navigation Information Service (NIS), operated by the USCG Navigation Center, provides information for all radionavigation and maritime telecommunications systems. The NIS is staffed 24 hours a day, 7 days a week, providing information on the current operational status, effective policies, and general information for Global Positioning System (GPS), Differential GPS (DGPS), Loran-C, Universal Shipborne Automatic Identification System (AIS), and the Global Maritime Distress and Safety System (GMDSS), including NAVTEX, Digital Selective Calling (DSC), Inmarsat SafetyNET, and other Maritime Safety Information (MSI) broadcasts. Access to this information can be made directly, at no charge, via the Internet at <http://www.navcen.uscg.gov>.

The NIS also disseminates Safety Broadcasts (BNM), Local Notice to Mariners (LNM) and the latest Notice Advisory to Navstar Users (NANU). NANU notices can also be obtained via e-mail subscription through the USCG Navigation Center website (<http://www.navcen.uscg.gov/gps/default.htm>). In addition, the NIS investigates all reports of degraded or loss of GPS, DGPS or LORAN-C service. Mariners are encouraged to report all degradation, outages, or other incidents or anomalies of radionavigation services to the NIS via any of the following: Phone: 703-313-5900, E-mail: webmaster@navcen.uscg.mil, or on the World Wide Web at <http://www.navcen.uscg.gov>.

(Supersedes NTM 1(61)02)

(USCG)

(62) NATIONAL OCEAN CLAIMS.

The following list shows national claims of maritime jurisdiction. Publication of this material is solely for information relative to the navigational safety of shipping and in no way constitutes legal recognition by the United States. The information has been compiled from the best available sources.

Country	Territorial Sea	Fisheries or Economic Zone	Contiguous Zone	Continental Shelf
Albania	12*	15	---	200m or E
Algeria	12*	32-52	---	---
Angola	12	200	24	---
Antigua and Barbuda**	12*	200	24	200NM or CM
Argentina	12* (1)	200	24	200NM or CM
Australia	12 (2)	200	24	200NM or CM
The Bahamas**	12	200	---	200m or E
Bahrain	12	---	24	---
Bangladesh	12*	200	18 (3)	CM
Barbados	12*	200	---	---
Belgium	12	200 (4)	---	CS (4)
Belize	12 (5)	200	---	---
Benin	200	---	---	---
Bosnia-Herzegovina	--- (6)	---	---	---
Brazil	12* (7)	200 (7)	24	---
Brunei	12	200 (8)	---	---
Bulgaria	12* (9)	200	24	200m or E (9)
Burma	12* (10)	200	24 (10)	200NM or CM
Cambodia	12*	200	24 (11)	200NM

(62) NATIONAL OCEAN CLAIMS. (Continued).

Cameroon	12	---	---	---
Canada	12 (12)	200	24	200NM or CM
Cape Verde**	12*	200	24	200NM
Chile	12	200	24	200/350NM
China	12*	200 (13)	24 (13)	200NM or CS
Colombia	12	200	---	200m or E
Comoros**	12	200	---	---
Congo(Brazzaville)	200*	--- (14)	---	---
Congo(Kinshasa)	12	--- (14)	---	---
Cook Islands	12	200	---	200NM or CM
Costa Rica	12	200 (15)	---	200NM
Cote d'Ivoire	12	200	---	200NM
Croatia	12*	---	---	200m or E
Cuba	12 (16)	200	---	200m
Cyprus	12	---	---	200m or E
Denmark	12* (17)	200		200m or E
Djibouti	12 (18)	200	24	---
Dominica	12	200	24	---
Dominican Republic	6 (19)	200	24	200NM or CM
East Timor	12	200	24	200NM or CM
Ecuador	200 (20)	---	---	--- (20)
Egypt	12* (21)	200	24 (21)	200m or E
El Salvador	200 (22)	---	---	---
Equatorial Guinea	12	200	---	---
Eritrea	(23)	---	---	---
Estonia	12 (24)	--- (24)	---	---
Fiji**	12	200	24	200m or E
Finland	12*(25)	12	6	200m or E
France	12 (26)	200 (26)	24	200m or E
Gabon	12	200	24	---
Gambia, The	12	200	18	---
Georgia	--- (27)	---	---	---
Germany	12	200	---	200m or E
Ghana	12	200	24	200NM
Greece	6 (28)	---	---	200m or E
Grenada	12*	200	---	---

(62) NATIONAL OCEAN CLAIMS. (Continued).

Guatemala	12 (29)	200	---	200m or E
Guinea	12	200	---	---
Guinea-Bissau	12	200	---	---
Guyana	12*	200	---	200NM or CM
Haiti	12 (30)	200	24 (30)	E
Honduras	12 (31)	200	24	---
Iceland	12	200	---	200NM or CM
India	12*	200	24 (32)	200NM or CM
Indonesia**	12 (33)	200	---	---
Iran	12*	--- (34)	24 (34)	--- (34)
Iraq	12	---	---	CS
Ireland	12	200	---	CS
Israel	12	---	---	E
Italy	12 (35)	---	---	200m or E
Jamaica**	12	200	24	200NM or CM
Japan	12 (36)	200	24	200NM or CM
Jordan	3	---	---	---
Kenya	12 (37)	200	---	200m or E
Kiribati**	12	200	---	---
Korea, North (DPRK)	12* (38)	200	50 (38)	---
Korea, South (ROK)	12* (39)	200	24	CS
Kuwait	12	---	---	---
Latvia	12	200	---	200m or E
Lebanon	12	---	---	---
Liberia	200	---	---	---
Libya	12* (40)	---	---	CS
Lithuania	12	---	---	---
Madagascar	12	200	24	200NM (41)
Malaysia	12 (42)	200	---	200m or E
Maldives**	12*	200	24	---
Malta	12*	25	24	200m or E
Marshall Islands**	12	200	24	---
Mauritania	12 (43)	200	24	200NM or CM
Mauritius	12*	200	---	200NM or CM
Mexico	12 (44)	200	24	200NM or CM
Micronesia, Federated States of	12	200	---	---

(62) NATIONAL OCEAN CLAIMS. (Continued).

Monaco	12	---	---	---
Morocco	12	200	24	200m or E
Mozambique	12	200	---	---
Namibia	12	200	24	200NM or CM
Nauru	12	200	24	---
Netherlands	12* (45)	200	---	---
New Zealand	12 (46)	200 (46)	24	200NM or CM
Nicaragua	200*	---	25	---
Nigeria	12	200	---	200m or E
Niue	12	200	---	---
Norway	4	200	10	200NM or CM
Oman	12*	200	24	---
Pakistan	12* (47)	200	24 (47)	200NM or CM
Palau	3	200	---	---
Panama	12(48)	200	24	200NM or CM
Papua New Guinea**	12	200	---	200m or E
Peru	200 (49)	---	---	200
Philippines**	---* (50)	200	---	E
Poland	12 (51)	200 (51)	---	---
Portugal	12 (52)	200	24	200m or E
Qatar	12	--- (53)	24	CS
Romania	12*	200	24	200m or E
Russia	12	200	---	200m or E
Saint Kitts and Nevis	12	200	24	200NM or CM
Saint Lucia	12	200	24	200NM or CM
Saint Vincent and the Grenadines**	12*	200	24	---
Samoa	12	200	---	---
Sao Tome and Principe**	12	200	---	---
Saudi Arabia	12 (54)	---	18 (54)	CS
Senegal	12	200	24	200NM or CM
Seychelles**	12*	200	24	200NM or CM
Sierra Leone	200	---	---	200NM
Singapore	3	---	---	---
Slovenia	--- * (55)	---	---	---
Solomon Islands**	12	200	---	200NM
Somalia	200*	---	---	---

(62) NATIONAL OCEAN CLAIMS. (Continued).

South Africa	12	200	24	200NM or CM
Spain	12 (56)	200 (56)	24	---
Sri Lanka	12* (57)	200	24 (57)	200NM or CM
Sudan	12*	---	18 (58)	200m or E
Suriname	12	200	---	---
Sweden	12 (59)	200	---	200m or E
Syria	35*	---	41 (60)	200m or E
Tanzania	12	200	---	---
Thailand	12 (61)	200	---	---
Togo	30	200	---	---
Tonga	12 (62)	200	---	200m or E
Trinidad and Tobago **	12	200	24	200NM or CM
Tunisia	12 (63)	---	24	---
Turkey	(64)	200 (64)	---	---
Tuvalu	12	200	24	---
Ukraine	12	200	---	200m or E
United Arab Emirates	12*	200 (65)	24	200NM or CM
United Kingdom	12	200 (66)	---	Defined by coordinates
United States	12	200 (67)	24	200NM or CM
Uruguay	12 (68)	200	24	200NM or CM
Vanuatu **	12	200	24	200NM or CM
Venezuela	12	200	15 (69)	200m or E
Vietnam	12* (70)	200	24 (70)	200NM or CM
Yemen	12* (71)	200	24 (71)	200NM or CM
Yugoslavia	12	---	---	---

Abbreviations:

CS - Continental Shelf (no specified limits)
CM - Continental Margin
E - Limit of Exploitation
m - meters (depth)
NM - nautical miles

* Indicates a state which requires advance permission or notification for innocent passage of warships in the territorial sea. The United States does not recognize this requirement.

** Indicates an archipelagic state.

FOOTNOTES

Security Zone - A state claim to control activity beyond its territorial sea for security reasons unrelated to that state's police powers in its territory, including its territorial sea. This Summary lists only those Security Zones which presently claim to restrict navigation and overflight activities conducted exclusively beyond their claimed territorial seas. A claim of right of surveillance beyond the territorial sea or a claim of the right of "hot pursuit" in enforcing violations of law which occur in a

(62) NATIONAL OCEAN CLAIMS. (Continued).

state's territorial sea, inland waters, or land territory does not constitute a claimed Security Zone.

Fishery zones not extending beyond a claimed territorial sea or EEZ are encompassed within the territorial sea or EEZ and not listed separately.

Many coastal nations have established straight baselines or have asserted historic waters claims. These footnotes mention some of the more significant ones. It exceeds the scope of this Summary, however, to provide an exhaustive list of baseline and historic waters claims. Accordingly, users should refer to other sources of information to obtain a complete compendium of maritime claims.

1. Argentina. Claims San Matias Gulf (Golfo San Matias), Nuevo Gulf (Golfo Nuevo) and San Jorge Gulf (Golfo San Jorge) as internal waters and claims, jointly with Uruguay, the Rio de la Plata estuary as internal waters.
2. Australia. Claims Anxious, Rivoli, Encounter and Lacepede Bays as historic waters.
3. Bangladesh. Contiguous Zone also considered a Security Zone. Nuclear-powered vessels and vessels transporting nuclear materials or other radioactive substances are required to give notice prior to entering territorial sea.
4. Belgium. Fishery zone and CS extend to median line equidistant from baseline of neighbors.
5. Belize. From the mouth of the Sarstoon River to Ranguana Cay, Belize's territorial sea is 3NM; according to Belize's Maritime Areas Act, 1992, the purpose of this limitation is "to provide a framework for the negotiation of a definitive agreement on territorial differences with the Republic of Guatemala."
6. Bosnia-Herzegovina. No information on maritime claims is available.
7. Brazil. Claims to require permission for more than 3 warships of same flag to be in territorial sea at same time. Military exercises can be carried out in EEZ only with Brazil's consent.
8. Brunei. 200NM or median EEZ.
9. Bulgaria. In territorial sea and internal waters, foreign submarines shall be required to navigate on the surface. Innocent passage of warships limited to designated sea lanes. CS limits will be established by agreement between states with adjacent or opposite coasts on Black Sea on basis of international law.
10. Burma. Claims as internal waters all waters inside a 223NM baseline closing Gulf of Martaban as well as waters inside straight baselines connecting coastal islands. Contiguous Zone also considered a Security Zone.
11. Cambodia. Contiguous Zone also considered a Security Zone.
12. Canada. Claims as internal waters all waters between its islands in the Arctic; also claims Hudson Bay as a historic bay.
13. China. Claims right to create safety zone around any structure in EEZ, right to require prior authorization to lay submarine cables and pipelines, and right to broad powers to enforce laws in the EEZ. Contiguous Zone also considered a Security Zone.
14. Congo. Fishery zone limits to be fixed in coordination with neighboring states.
15. Costa Rica. Permit required for foreign flag fishing vessels to transit Costa Rican waters.
16. Cuba. Claims straight baselines enclosing varying distances of water between Cape Frances (Cabo Frances), the Isle of Pines (Isla de la Juventud) (notable are those enclosing 21-35.6N and 79-50.5W), Breton Cay (Cayo Breton) and Cape Cruz (Cabo Cruz) as internal waters.

(62) NATIONAL OCEAN CLAIMS. (Continued).

17. Denmark. No prior notification required in straits, unless more than 3 warships at once. Includes Greenland and Faroe Islands. Straight baselines have the effect of enclosing waters between the Faroe Islands. Drogden and Hollenderdyb claimed as internal waters. 3NM territorial sea for Faroe Islands and Greenland.

18. Djibouti. Nuclear-powered vessels and vessels transporting nuclear materials or other radioactive substances are required to give notice prior to entering territorial sea.

19. Dominican Republic. Claims Samana, Ocoa, Neiba, Escocesa and Santo Domingo Bays as historic bays; Samana, Ocoa and Neiba bays qualify as juridical bays.

20. Ecuador. Straight baselines have the effect of enclosing waters between the Galapagos Islands. Claims right to enforce environmentally-based navigational restrictions in the vicinity of the Galapagos. Beyond 200NM, CS claimed along the undersea Carnegie Ridge (measured 100 miles from the 2500m-depth isobath).

21. Egypt. Contiguous Zone also considered a Security Zone. Claims right to prior permission for entry of nuclear-powered vessels or vessels carrying nuclear materials and foreign ships carrying hazardous or other wastes.

22. El Salvador. Claims the right to exercise sovereignty and jurisdiction over the sea, the seabed and seafloor to 200NM. Claims Gulf of Fonseca (Golfo de Fonseca) as a historic bay.

23. Eritrea. No information on maritime claims is available.

24. Estonia. Nuclear-powered ships must apply for permission 30 days in advance to enter territorial sea. Innocent passage prohibited for ships carrying radioactive materials, explosives and marine pollutants defined as hazardous and certain oil and fertilizer products unless those cargoes are loaded or unloaded in an Estonian port. Fishery zone limits to be fixed in coordination with neighboring states.

25. Finland. In the Gulf of Finland territorial sea is 3NM.

26. France. Territorial sea limits apply to all French dependencies. EEZ claim includes the following French dependencies: Clipperton Island, French Guiana, French Polynesia, French Southern and Antarctic Lands, Guadeloupe, Glorioso Islands, Juan de Nova Island, Europa Island, Bassas da India, Martinique, New Caledonia, St. Pierre and Miquelon, Tromelin Island, and Wallis and Futuna.

27. Georgia. No information on maritime claims is available.

28. Greece. Territorial airspace claim extends to 10NM for control of civil aviation.

29. Guatemala. Claims Gulf of Amatique (Bahia de Amatique) as a historic bay.

30. Haiti. Draws territorial sea limits in a manner which implies straight baselines including across the mouth of the Gulf of Gonave (Golfo de la Gonave). Contiguous Zone also considered a Security Zone.

31. Honduras. Claims Gulf of Fonseca (Golfo de Fonseca) as a historic bay.

32. India. Contiguous Zone also considered a Security Zone. Claims Gulf of Mannar and Palk Bay as historic waters.

33. Indonesia. Submarines must navigate above water level and show national flag. Nuclear vessels and vessels carrying nuclear material must carry documents and adhere to international special preventative measures.

34. Iran. Claims security jurisdiction in Contiguous Zone. Fishery zone and CS extend to median line equidistant from baseline of neighbors.

35. Italy. Claims the Gulf of Taranto (Golfo di Taranto) as a historic bay.

(62) NATIONAL OCEAN CLAIMS. (Continued).

36. Japan. Claims straight baselines. A high seas corridor remains in 5 “international straits”: Tsugaru Strait (Tsugaru-kaikyo), La Perouse Strait, Osumi Strait (Osumi-kaikyo) and East and West channels of Tsushima.
37. Kenya. Established straight baseline system. Claims Ungwana Bay as a historic bay.
38. Korea, North (DPRK). Measures claims from claimed straight baselines, not coastline. Claims a 50/200NM Security Zone within which all foreign vessels and aircraft are banned without permission; it extends to 50NM in the Sea of Japan and to the limit of EEZ in the Yellow Sea.
39. Korea, South (ROK). Claims straight baselines. A high seas corridor remains in Korea Strait.
40. Libya. Claims the Gulf of Sidra as a historic bay. All merchant ships required to give prior notice of innocent passage.
41. Madagascar. CS 200NM or 100NM from 2500m-depth isobath.
42. Malaysia. Prior authorization requirement for nuclear-powered ships or ships carrying nuclear material to enter the territorial sea.
43. Mauritania. Claims 89NM straight baseline from Cape Blanc (Cap Blanc) to Cape Timiris (Cap Timiris).
44. Mexico. No more than 3 foreign warships will be authorized in Mexican ports on each coast at the same time, and no more than one in any given port. Port calls by more than one training vessel can be authorized only if permission is requested three months in advance. Nuclear-powered and nuclear-armed ships are not allowed to enter Mexican territorial waters or dock in Mexican ports.
45. Netherlands. Considers the Westerschelde internal waters through which passage requires prior permission. Includes Aruba and the Netherlands Antilles.
46. New Zealand. Includes Tokelau. Prohibits entry of nuclear-powered and nuclear armed ships into its ports.
47. Pakistan. Foreign supertankers, nuclear-powered ships and ships carrying nuclear materials are required to give prior notification for entry into territorial sea. Contiguous Zone also considered a Security Zone.
48. Panama. Claims Gulf of Panama as a historic bay.
49. Peru. 200 mile territorial sea is without prejudice to freedom of international communication, “in conformity with the laws and treaties ratified by the state.”
50. Philippines. In addition to its claim of archipelagic waters, claims as maritime territorial waters areas embraced within the lines described in the 1898 Treaty of Paris as subsequently modified. The resulting territorial sea varies from one-half to 285NM in width.
51. Poland. Claims a closing line across Gulf of Gdansk and a fishing zone to the median line in the Baltic. EEZ is determined by lines connecting extreme points of specified lateral limits.
52. Portugal. Established straight baselines for various areas along continental coast and Madeira and Azores island groups. Claims Tagus and Sado estuaries and associated bays as historic waters.
53. Qatar. Extends to median line with neighboring states.
54. Saudi Arabia. Claims power to regulate nuclear-powered vessels in the territorial sea and to require prior authorization for such vessels. Contiguous Zone also considered a Security Zone.
55. Slovenia. No information on maritime claims is available.

(62) NATIONAL OCEAN CLAIMS. (Continued).

56. Spain. Claims to control transit passage by aircraft and exercise pollution control over vessels in international strait. Claims 200NM Economic Zone in Atlantic only.

57. Sri Lanka. Contiguous Zone also considered a Security Zone. Claims Palk Bay, Palk Strait and Gulf of Mannar as historic waters.

58. Sudan. Contiguous Zone also considered a Security Zone.

59. Sweden. Territorial sea claim is less than 12NM (but varying) in certain areas of the Skagerrak, the Kattegat and the Baltic.

60. Syria. Claims Security Zone 6 miles beyond territorial sea limit.

61. Thailand. Claims inner Gulf of Thailand as a historical bay to 12°35'45"N.

62. Tonga. Claims 12NM territorial sea for Minerva Reef.

63. Tunisia. Claims straight baselines enclosing Gulf of Tunis (Khalij Tunis) and Gulf of Gabes (Khalij Gabes) as internal waters.

64. Turkey. Claims a 12NM territorial sea in the Black Sea and in the Mediterranean and a 6NM territorial sea in the Aegean. EEZ is claimed in the Black Sea.

65. United Arab Emirates. EEZ extends to agreed CS boundaries or to median lines.

66. United Kingdom. Fishery claims include Ascension, Bermuda, British Virgin Islands, Cayman Islands, Ducie and Oeno Atolls, Henderson Island, Pitcairn Island, St. Helena, Tristan da Cunha, Turks and Caicos Islands. Has also established a fishing zone around the Falkland/Malvinas Islands; although 200NM wide, the zone is only enforced to a distance of 150NM.

67. United States. EEZ applies to Northern Marianas (consistent with the Covenant), American Samoa, Guam, Puerto Rico, U.S. Virgin Islands and other U.S. possessions and territories.

68. Uruguay. Claims, jointly with Argentina, the Rio de la Plata estuary as internal waters.

69. Venezuela. Claims 15NM Security Zone.

70. Vietnam. Claims half of the Gulf of Tonkin as historic internal waters and uses straight baselines for measuring the territorial sea. Baselines purport to enclose portions of the South China Sea up to approximately 75NM in width as internal waters. Contiguous Zone also considered a Security Zone.

71. Yemen. Claims notice requirement for warships, nuclear-powered vessels and vessels transporting nuclear materials or other radioactive substances prior to entering the territorial sea. Contiguous Zone also considered a Security Zone.

(Supersedes NTM 1(62)02)

(DEPT. OF STATE)

(63) U.S. ECONOMIC SANCTIONS: CONCERNS FOR MARINERS.

The Office of Foreign Assets Control (“OFAC”) of the U.S. Department of the Treasury administers and enforces economic and trade sanctions based on US foreign policy and national security goals against targeted foreign countries, terrorists, international narcotics traffickers, and those engaged in activities related to the proliferation of weapons of mass destruction. Many of these programs directly impact mariners.

GENERAL CONCERNS FOR MARINERS:

U.S.-registered vessels and other vessels subject to U.S. jurisdiction, U.S. individuals (citizens or residents wherever located, and individuals located in the United States) and U.S. businesses (including their foreign branches and foreign firms’ U.S. locations) are generally prohibited from providing maritime transportation, vessel chartering, brokerage services, marine insurance, or reinsurance services involving:

- Unlicensed shipments of goods where the country of origin is subject to a trade embargo;
- Unlicensed shipments of goods to or from countries subject to a trade embargo;
- Carriage of passengers to or from Cuba, Libya and Iran;
- The carriage of passengers who are nationals of Cuba;
- Shipments of goods in which there is an interest of a target government or a Specially Designated National of a country subject to comprehensive sanctions or, in the case of Cuba, an interest of any of their nationals;
- Waterborne transportation services to unapproved locations in Angola;
- The purchase of services or bunkering at ports located within the territory of countries subject to a trade embargo.

It is important to note that U.S. sanctions programs vary considerably and what is prohibited with regard to one country may be permitted or licensable with regard to another.

GENERAL TRADE RESTRICTIONS BY COUNTRY:

The following summary provides a broad overview of trade sanctions administered by OFAC. In cases consistent with U.S. foreign policy, OFAC may issue licenses permitting transactions that would otherwise be prohibited. The exportation of pre-existing informational materials (such as books, publications, certain works of art, films etc.) is permitted to all countries except Iraq.

Please note that certain transactions may also be subject to licensing requirements of other U.S. government agencies (e.g. U.S. Departments of Commerce, State or Energy).

CUBA- No exportation or reexportation of goods, services, or technology to Cuba, except food, medicine, medical equipment, or agricultural commodities licensed by the U.S. Department of Commerce; no importation of goods or services from Cuba; no dealing in Cuban-origin goods or in property in which the Government of Cuba or a Cuban national has an interest; no brokering of Cuban trade contracts; no use, brokering, or insuring of Cuban-owned vessels. No vessel that enters a Cuban port to engage in the trade of goods or the purchase of services may enter a U.S. port to load or unload freight for a period of 180 days following departure from Cuba. No vessel carrying goods or passengers to or from Cuba or carrying goods in which Cuba or a Cuban national has an interest may enter a U.S. port with such goods or passengers on board. Travel-related transactions in Cuba require an OFAC license.

NORTH KOREA- Goods of North Korean origin may not be imported into the United States either directly or through third countries, without prior notification to and approval from OFAC.

LIBYA- No exportation of goods, services, or technology to Libya, except agricultural commodities and products, medicine, or medical equipment licensed by OFAC; no importation of goods or services from Libya; no dealing in Libyan-origin goods for export to another country or in property in which the Government of Libya has an interest; no brokering of Libyan trade contracts. Travel and transportation-related transactions to, from, and in Libya require an OFAC license.

IRAN- No exportation or reexportation of goods, services, or technology to Iran, except agricultural commodities and products, medicine, or medical equipment licensed by OFAC (general or specific license); no importation of goods or services from Iran, nor dealing in Iranian-origin goods, except for foodstuffs intended for human consumption (that are classified under chapters 2-23 of the Harmonized Tariff Schedule of the U.S.) and carpets and other textile floor coverings (that are classified under chapter 57 or heading 9706.00.60 of the Harmonized Tariff Schedule of the U.S.); no facilitation of foreign nationals’ transactions with Iran; no brokering of unauthorized Iranian trade contracts.

(63) U.S. ECONOMIC SANCTIONS: CONCERNS FOR MARINERS. (Continued).

IRAQ- No exportation or reexportation of goods, services, or technology to Iraq; no importation of goods or services from Iraq; no dealing in Iraqi-origin goods or in property in which the Government of Iraq has an interest; no brokering of Iraqi trade contracts; no transfers to persons in Iraq; participation in UN “Oil for Food Program” involving purchases of oil and sales of food and medicine requires an OFAC license. Travel and transportation-related transactions to, from, and in Iraq require an OFAC license.

SUDAN- No exportation or reexportation of goods, services, or technology to Sudan, except agricultural commodities and products, medicine, or medical equipment licensed by OFAC; no importation of goods or services from Sudan; no dealing in Sudanese-origin goods or in property in which the Government of Sudan has an interest; no facilitation of foreign nationals’ transactions with Sudan; no brokering of Sudanese trade contracts.

FEDERAL REPUBLIC OF YUGOSLAVIA MILOSEVIC/BALKANS- No exportation or reexportation of goods, services or technology to designated family members, supporters and members of the regime of former President Slobodan Milosevic or to persons deemed to be destabilizing the Western Balkans region; no importation of goods, services or technology and no brokering or other facilitation of trade with such designated persons; no dealing in property in which such designated persons have an interest. These individuals can be found on OFAC’s list of Specially Designated Nationals and Blocked Persons (see below).

ANGOLA (UNITA)- No exportation of arms, arms materiel, petroleum, petroleum products, aircraft, or aircraft components, mining equipment, motorized vehicles, watercraft, spare parts for motorized vehicles or watercraft, mining services, or ground or waterborne transportation services to UNITA or unapproved locations in Angola; no dealings in property in which UNITA has an interest; no importation of uncertified diamonds from Angola.

BURMA (Myanmar)- No new investment that includes the economic development of resources in Burma; most trade in goods, services authorized.

LIBERIA- Prohibition on the direct or indirect importation of rough diamonds from Liberia.

SIERRA LEONE- Prohibition on the direct or indirect importation of rough diamonds not controlled through the Certificate of Origin Regime of the Government of Sierra Leone.

SYRIA- No receipt of unlicensed donations from the Government of Syria by U.S. persons; no financial transaction in which a U.S. person knows or has reasonable cause to believe poses a risk of furthering terrorist acts in the United States; normal commercial transactions not affected.

WEAPONS OF MASS DESTRUCTION- No importation of goods, technology, or services produced or provided by certain foreign persons designated by Secretary of State for having promoted the proliferation of weapons of mass destruction.

SPECIALLY DESIGNATED NATIONALS AND BLOCKED PERSONS (SDNs)

As part of its enforcement efforts, OFAC publishes a list of individuals and companies owned or controlled by, or acting for or on behalf of, targeted countries. It also lists individuals, groups, and entities, such as terrorists and narcotics traffickers designated under programs that are not country-specific. Collectively, such individuals and companies are called “Specially Designated Nationals” or “SDNs.” U.S. persons are generally prohibited from dealing with SDNs and any property or assets in which an SDN has an interest must be blocked if under the control of a U.S. person.

OFAC JURISDICTION:

All U.S. citizens and permanent residents, companies organized in the United States, foreign branches of U.S. companies, individuals and entities located in the United States (including domestic affiliates of foreign companies), are subject to OFAC regulations. Furthermore, foreign subsidiaries of U.S. companies must comply with the sanctions against Cuba and North Korea. Such persons may not facilitate or assist foreign companies (e.g., as financiers, brokers, or other intermediaries) with transactions in which they themselves could not participate directly, and U.S. employees of foreign companies must ensure that they do not engage in transactions on behalf of their employer which would be prohibited if the company was American. Vessels subject to U.S. jurisdiction include:

(63) U.S. ECONOMIC SANCTIONS: CONCERNS FOR MARINERS. (Continued).

U.S. flag vessels;
vessels owned or controlled by U.S. companies;
vessels within U.S. waters;
for sanctions against Cuba and North Korea, vessels owned or controlled by foreign subsidiaries of U.S. companies.

SANCTIONS VIOLATIONS-THE PENALTIES:

Potential civil and criminal penalties, as well as the associated negative publicity resulting from a company's violation of U.S. sanctions, can prove to be strong motivational factors in getting a company to devote the appropriate time and resources to implementing quality OFAC compliance procedures. Civil penalties range from \$11,000 to \$1,000,000 per violation; criminal violations of the statutes administered by OFAC can result in corporate and personal fines of up to \$10 million and 30 years in prison.

OFAC LICENSING:

OFAC has the authority to authorize transactions that would otherwise be prohibited under specific sanctions provisions. OFAC's Licensing Division reviews all license applications on a first-in, first-out, case-by-case basis and issues or denies licenses based on U.S. foreign policy and national security goals. The OFAC Licensing Division can be reached at by telephone (202) 622-2480 and by fax (202) 622-1657.

KEEPING CURRENT ON OFAC SANCTIONS PROGRAMS:

All of OFAC's public information documents are updated whenever there is a change to an existing program, or when a new program is announced. OFAC recommends that U.S. persons stay current on OFAC sanctions programs by utilizing some of the following user-friendly electronic resources:

World Wide Web (WWW) Home Page on the Internet- All of OFAC's program "brochures," as well as SDN information, are available free in downloadable camera-ready Adobe Acrobat® "*.PDF" format over the Treasury Department's World Wide Web Server. At the top of the home page, the date of OFAC's last change is displayed and a "What's New" file summarizes the latest sanctions developments. Access is also provided to statutes, United Nations resolutions, Executive Orders, actual *Federal Register* notices, and the entire *Code of Federal Regulations* dealing with OFAC. There are two listserv email subscription services available to the public on the site (see below). OFAC's Home Page site is <http://www.treas.gov/ofac>.

E-mail Subscription Service- OFAC offers two e-mail subscription services that provide subscribers with notices about changes and updates to OFAC's website. These voluntary services allow users to subscribe via the OFAC home page (<http://www.treas.gov/ofac>) to one of two separate distribution lists: financial operations bulletins geared toward the financial community, or "What's New" notices geared toward the general public (including exporters & importers, practicing attorneys, and researchers).

OFAC Fax-on-demand Service- OFAC operates a free automated fax-on-demand service, which can be accessed 24 hours a day, seven days a week, by dialing 202/622-0077 from any touch tone phone and following voice prompts. The Index lists all of the documents OFAC makes available by fax, and indicates the date each document was last updated.

U.S. Maritime Administration's Website- The U.S. Maritime Administration's website at <http://marad.dot.gov> contains a special link to OFAC's brochures and information, including a flashing indicator of latest updates.

U.S. Government Printing Office's The Federal Bulletin Board- The U.S. Government Printing Office operates a free bulletin board called "The Federal Bulletin Board" which can be accessed 24 hours a day, 7 days per week, by direct dialing 202/512-1387 from a modem using any communications software or using the Internet to connect to <http://fedbbs.access.gpo.gov>.

(63) U.S. ECONOMIC SANCTIONS: CONCERNS FOR MARINERS. (Continued).

U.S. Customs Service's Customs Electronic Bulletin Board- The U.S. Customs Service maintains a free Customs Electronic Bulletin Board geared especially toward Customs House Brokers. OFAC's information is available as a date-specific self-extracting DOS file ("OFAC*.EXE" in File Area #15, "Customs Extra!"). Modem access is at 703/440-6155 with voice system support at 703/440-6236.

QUESTIONS-THE OFAC COMPLIANCE HOTLINE:

If you have any questions regarding OFAC-administered sanctions programs, call OFAC's Compliance Hotline at 1-800-540-6322 [(202) 622-2490] on weekdays from 7:30 a.m. to 7:00 p.m. eastern time. OFAC also has a Miami branch office with a special bi-lingual hotline relating to information on the Cuban embargo which can be reached by telephone at (305) 810-5170.

NOTE: *This overview is meant to alert mariners to potential issues arising under U.S. sanctions and does not have the force of law. Reference should be made to the controlling legal authorities to determine the applicability of specific prohibitions, exceptions, and licensing provisions. The regulations governing OFAC sanctions programs are found in chapter V of title 31, Code of Federal Regulations. Prior to the issuance of regulations, a new OFAC sanctions program is governed by the relevant Presidential Executive order imposing sanctions and delegating implementation authority to the Secretary of the Treasury.*

(Supersedes NTM 1(63)02)

(DEPT. OF TREASURY)

(64) MARITIME INDUSTRY REPORTING OF A SUSPECTED OR ACTUAL TERRORIST INCIDENT

In addition to oil and hazardous substance releases, the National Response Center (NRC) must be notified of any suspected or actual terrorist incident (e.g., chemical, radiological, biological, or etiological discharge into the environment) anywhere in the United States and its territories, particularly one affecting transportation systems. Coast Guard units that receive reports of suspected or actual incidents should ensure such reports are reported to the NRC at 800-424-8802 or 202-267-2675. Individuals are encouraged to visit the NRC website (<http://www.nrc.uscg.mil>) for reporting requirements and other helpful information.

(USCG)